AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY DATA SHEETS

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US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

PLASTERS

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 15, 2004 Date revised: December 10,2008

Section I General Information

Product Name: American Clay Loma Finish: American Clay Porcelina Finish, American Clay Marittimo Finish

Formula: Proprietary Blend of Aggregates, Clays, and Preservatives

Manufacturer: American Clay, LLC
8724 Alameda Park Drive Suite F
Albuquerque, NM 87113
Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredients:	% by Wt:	CAS #:	OSHA PEL**:	ACGIH TLV**:
Quartz	<2%	14808-60-7	0.1mg/m^3 Resp.	0.05 mg/m^3 TWA
Nuisance Dust	-	-	5mg/m^3 Resp.	3mg/m^3 Resp.
Total Dust	-	-	15mg/m^3	10mg/m^3

NFPA/HMIS: Health – 1*, Fire – 0, Reactivity – 0, Specific Hazard – *see section VI*

***WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
Note: The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50micrograms respirable free silica per cubic meter of air (0.05mg/m3) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

Material Safety Data Sheet

Date prepared: August 15, 2004 Date revised: N/A (first edition)

Section III Physical Chemical Characteristics

Boiling Point:	Not Applicable	**Loose Fill Density:**	52-69 lbs/ft^3
Vapor Pressure:	Not Applicable	**Melting Point:**	Not Applicable
Vapor Density:	Not Applicable	**Evaporation Rate:**	Not Applicable
Solubility in Water:	Negligible		
Appearance and Odor:	Buff to White color powder with angular particles of white, tan, and grey.		

Section IV Fire and Explosion

Flammability:	Non-Combustible	**Upper & Lowe Flammable Limit:**	Not Applicable
Auto Ignition Temp:	Not Applicable	**Special Firefighting Procedures:**	Not Applicable
Combustion Products:	Not Applicable	**Sensitivity to Mechanical**	
Flash Point:	Not Applicable	**Impact/Static Discharge:**	Not Applicable

Means of Extinction: Use extinguishing media appropriate for surrounding media

Section V Reactivity Data

Stability:	Stable Under normal Conditions.
Hazardous Decomposition Products:	Thermal oxidative decomposition can produce calcium oxide.
Conditions of Reactivity:	Hazardous polymerization will not occur.
Incompatible Materials:	Reacts with acids to liberate carbon dioxide. Ignites on contact with fluorine. Also incompatible with alum and ammonium salts.

Section VI Health Hazard & Toxicological Information

Exposure Limits: *See Section II*

Acute Effects:

Irritancy of product:	Eye contact and inhalation are major routes of entry
Inhalation:	Inhalation of dust can cause irritation
Skin:	Prolonged or repeated skin contact can cause irritation.
Eyes:	Contact with eyes can cause irritation
Ingestion:	Not an expected route of entry

Chronic Effects & Carcinogenicity

Excessive inhalation of dust from these products can cause silicosis. Crystalline silica is listed as an IARC Class 1 potential carcinogen. It has been determined that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals and humans. These are chronic, slow developing diseases with symptoms usually delayed 10 years or more.

Signs and symptoms of exposure: There are generally no signs or symptoms of exposure to crystalline silica.

Medical Conditions Generally Aggravated by Exposure: Individuals with respiratory disease, or subject to eye irritation should not be exposed to crystalline silica dust.

Material Safety Data Sheet

Date prepared: August 15, 2004 Date revised: N/A (first edition)

California Proposition 65 Warning

This product contains crystalline silica, a chemical known to the State of California to cause cancer.

Section VII Spill, Leak & Disposal Procedures

Spill & Leak: Vacuum if possible to avoid generating airborne dust. Avoid breathing dust. Wear and approved respirator. Avoid adding water; product will become slippery when wet.

Waste Disposal: Dispose of waste in an approved landfill in accordance with federal, state, and local laws

Section VIII First Aid & Special Protection Information

First Aid

Inhalation: Move victim to fresh air. If breathing difficulty continues, give oxygen & obtain medical attention.
Skin contact: Wash with soap and warm water. If irritation develops, consult a physician.
Eye contact: Flush with water for at least 15 minutes. Call physician if irritation persists.
Ingestion: If large amounts are ingested, get immediate medical attention.

Respiratory Protection: Provide adequate general ventilation. Provide workers with NIOSH approved respirators for lung damaging dust when exposed to dust. Exposure levels over 100 times TLV (*Section II)* required air supplied respirators.

Skin & Eye Protection: Gloves and safety goggles should be worn when exposed to excessive dust.

Ventilation: Provide Local Exhaust ventilation to meet exposure limits *(Section II)*.

Section IX Special Precautions

Handling: Dust in the work area should be kept minimal and proper ventilation provided. Avoid inhalation of dust. Avoid eye contact with materials.

Storage: Use normal precautions to avoid bag breakage and spillage. Store in a dry place.

Other Precautions: Slippery when wet

Shipping: No special shipping information required.

Section X Abbreviations & References

Abbreviations:
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
PEL: Personnel Exposure Limits
TLV: Threshold Limit Values
TWA: Time Weighted Average
NIOSH: National Institute of Occupational Safety and Health
MSDS: Material Safety Data Sheets

Material Safety Data Sheet

Date prepared: August 15, 2004 Date revised: N/A (first edition)

References

ACGIH, Threshold Limit Values and Biological Exposure Indices for 2003
IARC Monographs, Volume 68, Silica, Some Silicates and Organic Fibers, 1997
Material Safety Data Sheets of raw materials

Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

Enjarre™

Material Safety Data Sheet

Date prepared: April 1, 2008 Date revised: N/A (first edition)

Section I General Information

Product Name: Enjarre Commercial Veneer Plaster

Formula: Proprietary Blend of Aggregates and Clays.

Manufacturer: American Clay, LLC
8724 Alameda Park Dr. NE
Albuquerque, NM 87113
Vox: 866.403.1634
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredients:	% by Wt:	CAS #:	OSHA PEL**:	ACGIH TLV**:
Quartz	<2%	14808-60-7	0.1mg/m^3 Resp.	0.05 mg/m^3 TWA
Nuisance Dust	-	-	5mg/m^3 Resp.	3mg/m^3 Resp.
Total Dust	-	-	15mg/m^3	10mg/m^3

NFPA/HMIS: Health – 1*, Fire – 0, Reactivity – 0, Specific Hazard – *see section VI*

***WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
Note: The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50micrograms respirable free silica per cubic meter of air (0.05mg/m3) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

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Section III Physical Chemical Characteristics

Material Safety Data Sheet

Date prepared: April 1, 2008 Date revised: N/A (first edition)

Boiling Point:	Not Applicable	**Loose Fill Density:**	52-69 lbs/ft^3
Vapor Pressure:	Not Applicable	**Melting Point:**	Not Applicable
Vapor Density:	Not Applicable	**Evaporation Rate:**	Not Applicable
Solubility in Water:	Negligible		
Appearance and Odor:	Buff to White color powder with angular particles of white, tan, and grey.		

Section IV Fire and Explosion

Flammability:	Non-Combustible	**Upper & Lowe Flammable Limit:**	Not Applicable
Auto Ignition Temp:	Not Applicable	**Special Firefighting Procedures:**	Not Applicable
Combustion Products:	Not Applicable	**Sensitivity to Mechanical**	
Flash Point:	Not Applicable	**Impact/Static Discharge:**	Not Applicable

Means of Extinction: Use extinguishing media appropriate for surrounding media

Section V Reactivity Data

Stability:	Stable Under normal Conditions.
Hazardous Decomposition Products:	Thermal oxidative decomposition can produce calcium oxide.
Conditions of Reactivity:	Hazardous polymerization will not occur.
Incompatible Materials:	Reacts with acids to liberate carbon dioxide. Ignites on contact with fluorine. Also incompatible with alum and ammonium salts.

Section VI Health Hazard & Toxicological Information

Exposure Limits: *See Section II*

Acute Effects:

Irritancy of product:	Eye contact and inhalation are major routes of entry
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Excessive inhalation of dust from these products can cause silicosis. Crystalline silica is listed as an IARC Class 1 potential carcinogen. It has been determined that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals and humans. These are chronic, slow developing diseases with symptoms usually delayed 10 years or more.

Signs and symptoms of exposure: There are generally no signs or symptoms of exposure to crystalline silica.

Medical Conditions Generally Aggravated by Exposure: Individuals with respiratory disease, or subject to eye irritation should not be exposed to crystalline silica dust.

California Proposition 65 Warning

This product contains crystalline silica, a chemical known to the State of California to cause cancer.

Section VII Spill, Leak & Disposal Procedures

Material Safety Data Sheet

Date prepared: April 1, 2008 Date revised: N/A (first edition)

Spill & Leak:	Vacuum if possible to avoid generating airborne dust. Avoid breathing dust. Wear and approved respirator. Avoid adding water; product will become slippery when wet.
Waste Disposal:	Dispose of waste in an approved landfill in accordance with federal, state, and local laws

Section VIII First Aid & Special Protection Information

First Aid

Inhalation:	Move victim to fresh air. If breathing difficulty continues, give oxygen & obtain medical attention.
Skin contact:	Wash with soap and warm water. If irritation develops, consult a physician.
Eye contact:	Flush with water for at least 15 minutes. Call physician if irritation persists.
Ingestion:	If large amounts are ingested, get immediate medical attention.
Respiratory Protection:	Provide adequate general ventilation. Provide workers with NIOSH approved respirators for lung damaging dust when exposed to dust. Exposure levels over 100 times TLV (*Section II)* required air supplied respirators.
Skin & Eye Protection:	Gloves and safety goggles should be worn when exposed to excessive dust.
Ventilation:	Provide Local Exhaust ventilation to meet exposure limits *(Section II)*.

Section IX Special Precautions

Handling:	Dust in the work area should be kept minimal and proper ventilation provided. Avoid inhalation of dust. Avoid eye contact with materials.
Storage:	Use normal precautions to avoid bag breakage and spillage. Store in a dry place.
Other Precautions:	Slippery when wet
Shipping:	No special shipping information required.

Section X Abbreviations & References

Abbreviations:
IARC: International Agency for Research on Cancer
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PEL: Personnel Exposure Limits
TLV: Threshold Limit Values
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Material Safety Data Sheets of raw materials

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

PRIMERS

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: American Clay Sanded Primer

Product Code Identification Number: MSDS Number:

GENERAL USE: Undercoating

PRODUCT DESCRIPTION: Acrylic latex coating

DISTRIBUTOR'S NAME American Clay, LLC	DATE PREPARED: January 16, 2007 SUPERSEDES: New	Page 1 of 4
ADDRESS (NUMBER, STREET, P.O. BOX) 2601 Karsten Court SE	TELEPHONE NUMBER FOR INFORMATION (866) 404-1634	
(CITY, STATE AND ZIP CODE) COUNTRY Albuquerque, NM 87501 USA	EMERGENCY TELEPHONE NUMBER (866) 404-1634	
MANUFACTURER'S NAME Not specified		
ADDRESS (NUMBER, STREET, P.O. BOX)	TELEPHONE NUMBER FOR INFORMATION	
(CITY, STATE AND ZIP CODE) COUNTRY	EMERGENCY TELEPHONE NUMBER	

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	% (by weight)	OSHA PEL		ACGIH TWA		SARA TITLE III	RQ LBS
			PPM	MG/M3	PPM	MG/M3		
No hazardous materials present as defined by OSHA - 29 CFR 1910.1000; EPA - 40 CFR 260 - 281, 302, 355, 370, 372; DOT - 49 CFR 172; WHMIS or EC Directive 91 / 155 / EEC.								

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Mild liquid, prolonged contact may cause skin & eye irritation. Ingestion may cause gastric distress. Hazard symbols for this product - None Risk Phrases - Not classified

POTENTIAL HEALTH EFFECTS

INHALATION: None expected, however, certain individuals may experience minor nausea or headaches. Breathing airborne particles or dust from mixing, spraying, sanding, grinding, etc. may cause irritation to respiratory tract.

SKIN: None expected, however, prolonged contact may cause irritation.

EYES: Contact with eyes may cause irritation.

INGESTION: May cause gastric distress, vomiting and diarrhea.

CARCINOGENICITY NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; if symptoms persist seek medical attention.

SKIN: Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

EYES: Remove contact lenses. Flush eyes with water for 15 minutes; if irritation persists, seek medical attention.

INGESTION: Give two glasses of water for dilution; DO NOT induce vomiting; seek medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED)	FLAMMABLE LIMITS	LEL: Not applicable	UEL: Not applicable
Non-flammable	AUTOIGNITION TEMPERATURE:	Not determined	NFPA CLASS: **None**

GENERAL HAZARDS: Product is not considered flammable or combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

EXTINGUISHING MEDIA
Carbon dioxide, water, water fog, dry chemical, chemical foam

FIRE FIGHTING PROCEDURES
Keep containers cool with water spray to prevent container rupture due to steam buildup; floor will become slippery if material is released.

UNUSUAL FIRE AND EXPLOSION HAZARDS
None

HAZARDOUS COMBUSTION PRODUCTS
Smoke, fumes, oxides of carbon.

SECTION 6 - ENVIRONMENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel product into approved container for disposal. Wash area with plenty of water.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTR0LS

The use of local exhaust ventilation is recommended. No other special controls are indicated.

PERSONAL PROTECTION:

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

PROTECTIVE GLOVES: Recommended for general protection

EYE PROTECTION: Recommended for general protection

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyebath nearby

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (MM Hg) 17 mm Hg @ 20° C	VAPOR DENSITY (AIR = 1) > 1
SPECIFIC GRAVITY (WATER = 1) 1.263	EVAPORATION RATE (WATER = 1) < 1
SOLUBILITY IN WATER Dispersible	FREEZING POINT 32° F (0° C)
pH 8.0 - 9.0	APPEARANCE AND ODOR White viscous liquid, practically odorless
BOILING POINT 214°F (101° C)	PHYSICAL STATE Liquid
VISCOSITY (KREBS) 110 - 120	

SECTION 10 - STABILITY AND REACTIVITY

STABILITY UNSTABLE: STABLE: X	CONDITIONS TO AVOID: Extreme temperatures, keep from freezing

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong oxidizers, strong acids

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.

HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: X	CONDITIONS TO AVOID: None

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
No hazardous materials present as defined by OSHA - 29 CFR 1910.1000; EPA - 40 CFR 260 - 281, 302, 355, 370, 372; DOT - 49 CFR 172; WHMIS or EC Directive 91 / 155 / EEC.				

SECTION 12 - ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. Products classified as non - hazardous may become hazardous waste upon contact with other products. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not Regulated

DOT HAZARD CLASS / Pack Group:	None / None	IATA HAZARD CLASS / Pack Group:	None
REFERENCE:	Not Applicable	IMDG HAZARD CLASS:	None
UN / NA IDENTIFICATION NUMBER:	None	RID/ADR Dangerous Goods Code:	None
LABEL:	None Required	UN TDG Class / Pack Group:	None
HAZARD SYMBOLS:	None	Hazard Identification Number (HIN):	None

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories

None

313 Reportable Ingredients:

None

CERCLA (Comprehensive Response Compensation and Liability Act)

None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There are no reportable chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: Not controlled

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases	SYMBOL(S) REQUIRED FOR LABEL	EC Safety Phrases
Not classified	Not classified	S2 Keep out of the reach of children. S24/25 Avoid contact with skin and eyes.

SECTION 16 - OTHER INFORMATION

No specific notes.

HMIS HAZARD RATINGS				
	HEALTH	1	* = Chronic Health Hazard	2 = MODERATE
	FLAMMABILITY	0	0 = INSIGNIFICANT	3 = HIGH
	PHYSICAL HAZARD	0	1 = SLIGHT	4 = EXTREME
	PERSONAL PROTECTIVE EQUIPMENT	A	Safety Glasses	

REVISION SUMMARY: This MSDS has been revised in the following sections:
No changes noted

MSDS Prepared by: Comprehensive Data Base, Inc.
P.O. Box 395
Intercession City, FL 33848 USA
(863) 644 - 3298 www.compdatabase.com or www.msds.cc

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

SEALERS

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: July 14, 2006

Section I General Information

Product Name: Penetrating Sealer
Product Code: SF521
Product Description: Liquid
Product Use: Additive for American Clay plasters
Chemical Family: Acrylic – soy resin

Manufacturer: American Clay, LLC
2601 Karsten Court S.E.
Albuquerque, NM 87501

Vox: 505.243.5300
Fax: 505-244-9332

Section II Hazardous Ingredients

Ingredients:	CAS #:	OSHA PEL**:	ACGIH TLV**:
No hazardous components			

3. Hazards Identification

Eye contact: Slightly irritating; does not injure eye tissue
Skin contact: Mild skin irritation possible
Inhalation: No known effects on respiratory tract
Ingestion: Very low toxicity

4. First aid measures

Eye contact: Irrigate with eyewash solution or clean water until irritation is relieved. Consult physician if symptoms develop.
Skin contact: Wash skin thoroughly with soap and water after use.
Inhalation: Remove to fresh air; consult physician if irritation persists.

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

Ingestion: Induce vomiting only if victim is alert. Get prompt medical attention.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam or water fog.
Special hazards in fire: None expected
Firefighting procedures: For precaution, use self contained breathing apparatus.

6. Accidental release measures

Major spills should be taken up with sand or cat litter. Spill area can then be flushed with water. Local authorities should be consulted to define local disposal ordinances.

7. Handling and storage

It is recommended that the product be stored between 40 – 90 degrees F.

8. Exposure Controls

Ventilation: General – no special precautions
Eye protection: Some form of eye protection is always recommended
Hand protection: Gloves recommended
Hygiene measures: Wash before eating or drinking

9. Physical and chemical properties

Appearance: Milky white liquid
Odor: Little to none
pH: Slightly alkaline
Oxidizing properties: Little to none
Boiling point: 212 degrees F
Freezing point: 15 – 20 degrees F
VOC <25 grams/liter
Explosive properties:
Solubility in water: Complete
Volatiles: 80-82%

10. Stability and reactivity

Hazardous decomposition products: Stable under normal temperature and pressure.

11. Toxicological information

Route of entry: Inhalation, skin contact, eye contact
Toxicological: No known effect. Do not ingest and avoid direct contact with eyes. Use precautions as you would with all household chemicals.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM: (HMIS)
Hazard rating:

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

4 = Severe	Health: 0
3 = Serious	Flammability: 1
2 = Moderate	Reactivity: 0
1 = Slight	Personal protection: Gloves, eye protection
0 = Minimal	

12. Ecological information

N/A

13 Disposal Considerations

Use government approved waste disposal service. Consult with local authorities for proper disposal methods.

14. Shipping Information:

Not regulated

15. Regulatory information

Contact: Thomas Rauls
New Century Coatings
4320 E. San Remo Ave.
Higley, AZ 85236
602-625-8925

16. Other information:

The information given and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: July 14, 2006

Section I General Information

Product Name: Gloss sealer
Product Code: SF531
Product Description: Liquid
Product Use: Additive for American Clay plasters
Chemical Family: Acrylic – soy resin

Manufacturer: American Clay, LLC
2601 Karsten Court S.E.
Albuquerque, NM 87501

Vox: 505.243.5300
Fax: 505-244-9332

Section II Hazardous Ingredients

Ingredients:	CAS #:	OSHA PEL**:	ACGIH TLV**:
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Ingestion: Very low toxicity

4. First aid measures

Eye contact: Irrigate with eyewash solution or clean water until irritation is relieved. Consult physician if symptoms develop.
Skin contact: Wash skin thoroughly with soap and water after use.
Inhalation: Remove to fresh air; consult physician if irritation persists.

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

Ingestion: Induce vomiting only if victim is alert. Get prompt medical attention.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam or water fog.
Special hazards in fire: None expected
Firefighting procedures: For precaution, use self contained breathing apparatus.

6. Accidental release measures

Major spills should be taken up with sand or cat litter. Spill area can then be flushed with water. Local authorities should be consulted to define local disposal ordinances.

7. Handling and storage

It is recommended that the product be stored between 40 – 90 degrees F.

8. Exposure Controls

Ventilation: General – no special precautions
Eye protection: Some form of eye protection is always recommended
Hand protection: Gloves recommended
Hygiene measures: Wash before eating or drinking

9. Physical and chemical properties

Appearance: Milky white liquid
Odor: Little to none
pH: Slightly alkaline
Oxidizing properties: Minimal
Boiling point: 212 degrees F
Freezing point: 15 – 20 degrees F
VOC <25 grams/liter
Explosive properties:
Solubility in water: Complete
Volatiles: 80-82%

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Toxicological: No known effect. Do not ingest and avoid direct contact with eyes. Use precautions as you would with all household chemicals.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM: (HMIS)
Hazard rating:

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

4 = Severe	Health: 0
3 = Serious	Flammability: 1
2 = Moderate	Reactivity: 0
1 = Slight	Personal protection: Gloves, eye protection
0 = Minimal	

12. Ecological information

N/A

13 Disposal Considerations

Use government approved waste disposal service. Consult with local authorities for proper disposal methods.

14. Shipping Information:

Not regulated

15. Regulatory information

Contact: Thomas Rauls
New Century Coatings
4320 E. San Remo Ave.
Higley, AZ 85236
602-625-8925

16. Other information:

The information given and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

ADD-MIX

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Add-Mix
Product Code: SF541
Product Description: Liquid
Product Use: Hardening additive for American Clay plasters
Chemical Family: Acrylic – soy resin

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 866-404-1634
Fax: 505-244-9332

Section 2 Hazardous Ingredients

Ingredients:	CAS #:	OSHA PEL**:	ACGIH TLV**:
No hazardous components			

3 Hazards Identification

Eye contact: Slightly irritating; does not injure eye tissue
Skin contact: Mild skin irritation possible
Inhalation: No known effects on respiratory tract
Ingestion: Very low toxicity

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

4. First aid measures

5.

Eye contact: Irrigate with eyewash solution or clean water until irritation is relieved. Consult physician if symptoms develop.
Skin contact: Wash skin thoroughly with soap and water after use.
Inhalation: Remove to fresh air; consult physician if irritation persists.
Ingestion: Induce vomiting only if victim is alert. Get prompt medical attention.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam or water fog.
Special hazards in fire: None expected
Firefighting procedures: For precaution, use self contained breathing apparatus.

6. Accidental release measures

Major spills should be taken up with sand or cat litter. Spill area can then be flushed with water. Local authorities should be consulted to define local disposal ordinances.

7. Handling and storage

It is recommended that the product be stored between 40 – 90 degrees F. Protect from freezing.

8. Exposure Controls

Ventilation: General – no special precautions
Eye protection: Some form of eye protection is always recommended
Hand protection: Gloves recommended.
Hygiene measures: Wash before eating or drinking

9. Physical and chemical properties

Appearance: Milky white liquid
Odor: Little to none
pH: Slightly alkaline
Oxidizing properties: Little to none
Boiling point: 212 degrees F
Freezing point: 15 – 20 degrees F
VOC <25 grams/liter

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

Explosive properties:
Solubility in water: Complete
Volatiles: 82-84%

10. Stability and reactivity

Hazardous decomposition products: Stable under normal temperature and pressure.

11. Toxicological information

Route of entry: Inhalation, skin contact, eye contact
Toxicological: No known effect. Do not ingest and avoid direct contact with eyes. Use precautions as you would with all household chemicals.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM: (HMIS)
Hazard rating:

4 = Severe	Health: 0
3 = Serious	Flammability: 1
2 = Moderate	Reactivity: 0
1 = Slight	Personal protection: Gloves, eye protection
0 = Minimal	

12. Ecological information

Not available.

13 Disposal Considerations

Use government approved waste disposal service. Consult with local authorities for proper disposal methods.

14. Shipping Information:

Not regulated

15. Regulatory information

Contact: Thomas Rauls
New Century Coatings

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

4320 E. San Remo Ave.
Higley, AZ 85236
602-625-8925

16. Other information:

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AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

MUD GLUE

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: American Clay Mud Glue™

Formula: Proprietary Blend of Aggregates, Polymers, and Silicates

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.243-5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredients:	% by Wt:	CAS #:	OSHA PEL**:	ACGIH TLV**:
Limestone	<42%	1317-65-3	Total dust, 15mg/m^3 TWA Resp. dust, 5mg/m^{3}TWA	Total dust 10mg/m^{3}TWA
Proprietary Protein Polymer	<57%	N/A	Not established	Not established
Silica, quartz	<.1%	14808-60-7	Resp. dust, 0.1 mg/m^3 TWA	Resp.dust, 0.1 mg/m^3 TWA

NFPA/HMIS: Health – 1*, Fire – 0, Reactivity – 0, Specific Hazard – *see section VI*

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OAHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50micrograms respirable free silica per cubic meter of air (0.05mg/m3) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: There are no reported health effects associated with the repeated or prolonged exposure to pure calcium carbonates, however inhaling dust may cause respiratory tract irritation.

Specific hazards: Chronic exposure to respirable limestone dust at concentrations exceeding occupational exposure limits may increase the risk of developing pneumoconiosis (lung disease). This product contains crystalline silica (quartz) as an impurity. Prolonged exposure to respirable crystalline silica dust at concentrations exceeding occupational exposure limits may increase the risk of developing a disabling lung disease called silicosis.

4. First aid measures

Skin contact: If irritation occurs, flush with plenty of water. If irritation persists, consult a physician.
Eye contact: May cause irritation to the eyes. Flush with plenty of water. If irritation persists, seek medical attention.
Ingestion: May cause irritation to mouth, esophagus, and stomach. If ingested, DO NOT INDUCE VOMITING. Seek medical attention.
Inhalation: May be irritating to the respiratory tract. If irritation occurs, remove to fresh air.

5. Fire fighting measures

Suitable extinguishing media: Water, CO_2, dry chemicals

Unsuitable extinguishing media: N/A

Special hazards in fire: At temperatures of 750° or higher, there will be considerable smoke before and after combustion in which smoke inhalation protection should be worn.

Required special protective equipment for fire fighters: Protective clothing and eyewear, gloves, and rubber boots.

6. Accidental release measures

Personal precautions: Wear goggles, protective clothing, gloves, boots, and NIOSH-approved dust respirator.

Environmental precautions: Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Due to high pH of product, release into surface water is harmful to aquatic life.

Methods for cleaning: Sweep or vacuum spills, and place in a suitable container. Use appropriate personal

protective equipment. Dispose of according to applicable environmental regulations.

CERCLA RQ: There is no CERCLA Reportable Quantity for this material. If a spill goes off site, notification of state and local authorities is recommended.

7. Handling and storage

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Promptly clean up spills.

Storage: Keep containers closed. Store in clean steel or plastic containers. Separate from acids, reactive metals, and ammonium, salts. Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers.

8. Exposure Controls

Engineering measures: Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.
Personal protection equipment: Use NIOSH-approved dust respirator where dust occurs. Wear body-covering protective clothing and gloves. Wear chemical goggles.

9. Physical and chemical properties

Appearance: White powder
Odor: Slight ammonia odor
pH (in aqueous solution): 11.77
Boiling point: N/A
Melting point: N/A
Flashpoint: 550°F
Explosive properties: N/A
Vapour pressure: N/A
Tap density: N/A
Specific gravity: N/A
Relative density:
Solubility: Negligible solubility in water

10. Stability and reactivity

Stable under normal conditions.
Materials to avoid: Generates heat when mixed with acid. May react with ammonium salt solutions resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin lead, and zinc. Respirable dust particles including silica may be generated via abrasion during handling. Thermal oxidative decomposing can produce calcium oxide.
Hazardous decomposition products: Hydrogen. Reacts with acids to liberate carbon dioxide. Ignites on contact with fluorine. Also incompatible with alum and ammonium salts.

11. Toxicological information

Acute toxicity: When tested for primary irritations potential, this material caused moderate irritation to the eyes and slight irritation to the skin.

Excessive exposure may affect human health as follows:

Skin contact: May cause mild skin irritation. Symptoms include redness and irritation.

Eye contact: Mild irritation. Symptoms include watering and irritation.

Inhalation/ingestion: Can be irritating to the respiratory tract. Symptoms include sneezing and slight nose irritation.

12. Ecological information

Sinks and mixes with water. Only water will evaporate from this material

13 Disposal Considerations

Dispose of in accordance with federal, state, and local regulations and permits.

14. Transport information

Classification data: DOT UN Status – This material is not regulated hazardous material for transportation.

15. Regulatory information

CERCLA: No CERCLA Reportable Quantity has been established for this material.

SARA Title III: Not an Extremely Hazardous Substance under §302. Not a Toxic Chemical under §313. Hazard categories under §§311/312: Acute.

TSCA: All ingredients of this material are listed on the TSCA inventory.

FDA: Potassium silicate is regarded as GRAS (Generally Recognized as Safe) as a corrosion preventative in potable water.

16. Other Information

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While the information and recommendations in this publication are given in good faith, in all cases, it is the responsibility of the user to determine the accuracy and appluicabili8ty of such information and recommendations and the suitability of any product for its own particular purpose.

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

TEXTURAL ADDITIVES

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Mica
Product Code: L-125
Product Description: Solid
Product Use: Additive for American Clay Plasters and Sealers
Chemical Family: Silicate minerals

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Mica **CAS #:** 12001-26-2 **% by Wt.:** <95.0 – 99.9

OSHA PEL 20 MPPCF
TWA (ACGIH) 3 mg/m³ *

Ingredient: Quartz **CAS #:** 14808-60-7 **% by Wt.:** <0.1 to 5.0 ****

OSHA PEL 10 mg/m³ ÷ (%SiO2 +2) **

TWA (ACGIH) 0.1 mg/m³ *

OSHA (IDLH) 50 mg/m³ *** 10 hr TWA

*Respirable Dust – See Threshold Limit Value and Biological Exposure Indices for 1991 – 1992, ACGIH

**Respirable Quartz – See 29 CFR ¤ 1910.1000Table Z-1-A, Air Contaminants.

***Respirable Free Silica

****Respirable Free Silica for most products @ <1% (See Typical Property Data Sheet for specific product value)

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

3. Hazards Identification

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 0
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)*
1 = Slight	
0 = Minimal	

* Prolonged breathing of excessive dust may adversely affect lung function. Use NIOSH approved dust mask for dusty conditions. Prior existing lung or respiratory illness may be aggravated by exposure.

4. First aid measures

Eye contact: Immediately flush the eyes with plenty of water for at least fifteen minutes. If irritation occurs or persists, obtain medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If irritation occurs and persists, obtain medical attention.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Required special protective equipment for fire-fighters: It is recommended that firefighters wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

A spill can be sprayed with water to suppress dust and then either washed away or shoveled into a suitable disposal container. Dispose of waste according to federal EPA, state, and local regulations.

7. Handling and storage

Do not breathe dust and avoid getting into eyes.
Keep container closed.
Use with adequate ventilation.
Drying and/or grinding may increase dusting hazards.
Control dust levels in the workplace.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Provide adequate ventilation to maintain below-exposure limits; use NIOSH-approved dust respirators

9. Physical and chemical properties

Appearance: Odorless white powder
pH: (as is) @ 25°C: Not applicable
pH: (1% Slurry) @ 25°C: Not applicable
Boiling point: Not applicable
Melting point: Decomposes without melting near 1000°C (1832° F)
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Density / Specific Gravity: 2.8 g/cc
Solubility in water: Insoluble (% by wt. @ 25°C)

10. Stability and reactivity

Stability: Stable under normal conditions
Hazardous decomposition products: None

11. Toxicological information

Product Health Hazard (OSHA / IARC Statement): This material contains crystalline silica. Some researchers have reported evidence that it is carcinogenic in humans following prolonged and repeated inhalation. Prolonged and repeated breathing of dust can cause silicosis.

Routes of exposure: This substance may irritate the eyes. Respirable particles of quartz are hazardous to inhale. Chronic lung damage, scar tissue development in the lungs can occur if inhaled over an extended period of time. Follow TLV exposure limits.

Carcinogenicity: Crystalline silica is listed as a carcinogen to animals and there is limited evidence for the carcinogenicity to humans.

12. Ecological information

Not known to have negative effects on the environment.

14. Transport information

D.O.T. Hazardous Classification: None
D.O.T. Label: Mica
D.O.T. Shipping name: Mica

15. Regulatory information

TSCA (Toxic Substance Control Act) United States: As a naturally occurring substance, mica is Automatically included in the inventory under regulation 40 CFR 710.4, chapter 1, subsection b (7/1/86).

OSHA: PEL 8H TWA 20 mppcf, respirable dust. FEREAC 54, 2923, 89
PEL Final 8H TWA 3 mg/m³ respirable dust. FEREAC 54, 2923, 89

NIOSH Criteria Documents: Relative to silicates. (<1% Crystalline Silica): Mica in air: 10 H TWA 3 mg/m³

NIOSH DHHS #92-100, 92
NOHS 1974: Hazard 48535; NIS 135; TNF 12333; NOS 98; TNE 169296
NOHS 1983: Hazard X 1564; NIS 2; TNF 9; NOS 3; TNE 296

ACGIH: TLV-TWA 3 mg/m³, respirable dust. 85 INA 8 5, 413, 86

MSHA: Air TWA 20 mppcf. DTLWS 3, 33, 73

SARA III, Section 313: This product does not contain any toxic chemicals subject to the reporting Requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Clean Water Act Sections 307 and 311: Mica is classified as a "non-toxic pollutant" or "non-hazardous substance."

California Proposition 65: "Warning: This product contains a chemical known to cause cancer".

RCRA: Non hazardous under RCRA 3001 40 CFR Part 261.4(b)(7).

RCRA Metals – TCLP, EPA Method 1131, 40 CFR Part 261-24, Appendix II: No detectable amounts of toxic substances shown in this regulation were found in the leachate.

Heavy Metals "CONEG Model" Legislation: There are no cadmium, hexavalent chromium, lead or mercury additives in this mica product. Mica contains only trace amounts of these elements.

Canada (Ontario 309 & Quebec Class 1 Annexe III): Mica complies with the regulations. Mica is an inert product. No hazardous compound or ions leach from mica during normal processing.

WHMIS: Class D, Division 2, Subdivision A – Mica and silica are both listed (1% each)

DSL: Mica is on this list.

Japan: Mica is not listed in the MITI index. Substances controlled by this law are substances obtained by the chemical reactions of an element or a chemical compound. Mica is therefore exempted from regulation by this law.

Australia: Mica is listed in the ACOIN C.A.S. registry number section as mica group minerals, 12001-26-2. TWA 2.5 mg/m³.

Belgium, Switzerland: Mica TWA 3mg/m³

The Netherlands: Mica TWA 5mg/m³

United Kingdom: Mica TWA 1mg/m³ respirable dust; 10 mg/m³ total dust.

Bulgaria, Colombia, Jordan, Korea, New Zealand, Singapore, Viet Nam: TLV-TWA 3 mg/m³ respirable dust.

16. Other Information

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AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

COLOR PIGMENTS

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised:December 9, 2008

Section I General Information

Product Name: Acacia
Product Code: CP210
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.3 – 2.8

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <65 - 70

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.0 – 0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <10 - 12

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

Non-Hazardous: **% by Wt.:** <15 - 20
OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/mg³ (Total Dust) 5 mg/m³ (Respirable Dust)

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in

an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Yellow powder
Odor: None
pH: 5.8
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.6
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP210

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

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AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 9, 2008

Section I General Information

Product Name: Amber Grain
Product Code: CP290
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300 Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Barium Sulfate, Barytes (BASO4) **CAS #**: 7727-43-7 **% by Wt** : <5.0

OSHA PEL**: 5 mg/m³ (TWA)
ACGIH TLV*: 10mg/m³ (TWA)
*Total Dust
**Respirable Dust
5mg/m³ (respirable)

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <1.1

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <77.4

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <.7

OSHA PEL* 5mg/m³ (TWA)
ACGIH TLV* 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.1

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)

*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <4.1

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <11.7

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Additional Incompatibility: This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6.9
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .6
Specific gravity: 3.8
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP290
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Austin Blush
Product Code: CP215
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Barium Sulfate, Barytes (BASO4) **CAS #**: 7727-43-7 **% by Wt** : <6.9

OSHA PEL**: 5 mg/m³ (TWA)
ACGIH TLV*: 10mg/m³ (TWA)
*Total Dust
**Respirable Dust

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.9 – 3.2

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <61.5 – 64.5

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³and OSHA has set a PEL of 10mg/m³.

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <1

OSHA PEL* 5mg/m³ (TWA)
ACGIH TLV* 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.0 – 0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)

*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <11.6 – 12.8

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <11.5 – 14.5

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6.3
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.5
Solubility: N/A
Vapor pressure: N/A
Volatile (H2O): N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP215
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Baton Rouge
Product Code: CP195
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** < .2

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <89.4

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <2.8

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <7.6

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³(Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.2
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .8
Specific gravity: 4.6
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: N/A (first edition)

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP195
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Bluefield
Product Code: CP330
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Sodium Alumino Sulphosilicate	CAS #: 57455-37-5 101357-30-6	% by Wt.: 100

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades.

Environmental hazards: None

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

4. First aid measures

Skin contact: As with all powders, may cause irritation to sensitive skin. Wash with soap and water. If skin irritation persists, seek medical advice.

Eye contact: As with all powders, may cause irritation to eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If problem persists, seek medical advice.

Ingestion: Non-toxic – no action necessary

Inhalation: Non-toxic – no action necessary.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, water, or CO2. A water mist, fog, or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine powder: Avoid the use of high-pressure water, which could spread burning material and create hazardous conditions.

Hazardous Decomposition Products: Toxic, irritating sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Suitable breathing apparatus should be worn.

6. Accidental release measures

Personal precautions: No special precautions are necessary unless contact with acid or fire may occur, in which case suitable breathing apparatus should be worn.

Environmental precautions: Do not flush into surface water or sanitary sewer systems.

Methods for cleaning: Sweep up spills. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail.

7. Handling and storage

Handling: Avoid excessive dust generation, use appropriate dust control measures where necessary.

Storage: Store in a dry, well ventilated area. Do not store in areas where there is a risk of fire. Do not mix or store with acids

Packaging material: paper, polyethylene. Do not use polyvinyl chloride based materials.

8. Exposure Controls

Personal protection equipment: Use of a NIOSH approved dust respirator is recommended when exposure limits may be exceeded.

Eye protection: Wear safety goggles in windy conditions.

Hand protection: Plastic, cloth, or leather gloves

9. Physical and chemical properties

Appearance: Fine blue powder
Odor: None
pH: 6 to 9
Boiling point: N/A
Solubility: Insoluble in water and organic solvents
Decomposition Temperature: Loss of sulfur above 400° C
Specific gravity: 2.3 to 2.4
Tap density: N/A

10. Stability and reactivity

Stable in air at temperatures less than 350° C.

Conditions to avoid: At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas.

Materials to avoid: Acids, fire.

Hazardous decomposition products: Hydrogen sulfide gas, sulfur dioxide

11. Toxicological information

Non-toxic

Acute oral toxicity:LD50 is greater than 10,000 mg/kg

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly.

13 Disposal Considerations

Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains. Ultramarine pigments should not be disposed of where there is a risk of contact with acids.

14. Transport information

Classification data: Not classified as dangerous substances for supply or conveyance.

Do not transport with acids.

Label statement: CP330

15. Regulatory information

National Inventory Numbers:

TSCA (Toxic Substance Control Act) United States 57455-37-5

AICS (Australia) CAS #

DSL (Canada) CAS #

MITI (Japan) 1-22

EINECS (European Community) 3-099-283

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 3 ppm
Cadmium	Less than 0.5 ppm
Chromium	12 ppm
Mercury	Less than 1 ppm
Lead	17 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Borrego Tan
Product Code: CP265
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Barium Sulfate, Barytes (BASO4) **CAS #**: 7727-43-7 **% by Wt** : <6.9

OSHA PEL**: 5 mg/m³ (TWA)
ACGIH TLV*: 10mg/m³ (TWA)
*Total Dust
**Respirable Dust

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.9 – 3.2

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <61.5 – 64.5

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <1

OSHA PEL* 5mg/m³ (TWA)
ACGIH TLV* 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.0 – 0.2

OSHA PEL* 5 mg/m³ (TWA)

ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <11.6 – 12.8

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <11.5 – 14.5

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6.3
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.5
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP265
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 9, 2008

Section I General Information

Product Name: Bryce Canyon
Product Code: CP335
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300 Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Carbon Black **CAS #:** 1333-86-4 **% by Wt.:** < .8

OSHA PEL 3.5mg/m³ (TWA)
ACGIH TLV: 3.5 mg/m³ (TWA)

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** < .4 - .6

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <75.6 – 78.3

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.1

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <10.6 – 13.3

OSHA PEL** 20 MPPCF (TWA)

ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <8.6 – 9.4

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Additional risk summary: This product contains Carbon Black. Carbon Black contains trace amounts of PNAs, strongly absorbed polynuclear aromatic compounds. Some PNAs in the non-absorbing form have been found to be carcinogenic.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.3
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 4.1
Solubility: Insoluble

10. Stability and reactivity

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP335
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Chacolatte
Product Code: CP110
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Bituminous Coal **CAS #:** **% by Wt.:** <8.0

OSHA PEL*: 2.4 mg/m³ (TWA)
ACGIH TLV 0.9 mg/m³ (TWA)
*Respirable fraction <5% Sio2

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.2

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <41.9

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.3

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium Silicate **CAS #:** 14807-96-6 **% by Wt.:** <24.5

OSHA PEL**: 20
ACGIH TLV*: 2.0

Non-Hazardous: **% by Wt.:** <23.1

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease. This material contains a finely ground combustible solid. Upon combustion, this product can release noxious and/or toxic fumes of carbon dioxide, sulfur dioxide, sulfur monoxide, and methane.

Incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

Additional incompatibility: This material contains a complex hydrocarbon which may react exothermically upon contact with strong oxidizers.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.
Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.
Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting.
Seek medical help if problems arise.
Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Brown Powder
Odor: None
pH: 7.7
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .6
Specific gravity: 3.6
Solubility: Insoluble
Volatile (H2O): N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Additional Incompatibility: This material contains a complex hydrocarbon which may react exothermically upon contact with strong oxidizers.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP110

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313N/A
EINECS (European Community) Listed 269-047-4

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 9, 2008

Section I General Information

Product Name: Chesapeake Bay
Product Code: CP295
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay, LLC
2601 Karsten Court SE
Albuquerque, NM 87501

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <28.5

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <1

OSHA PEL* 0.10mg/m³ (TWA)
ACGIH TLV* 0.05mg/m³ (TWA)
*Respirable limits for particles < 10 um AD

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <0.3

OSHA PEL* 5mg/m³ (TWA)
ACGIH TLV* 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.1

OSHA PEL* 5mg/m³ (TWA)
ACGIH TLV 10mg/m³ (TWA)
*Respirable

Non-Hazardous: **% by Wt.:** <18.1

OSHA PEL: N/A
ACGIH TLV: N/A

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 9, 2008

Ingredient: Magnesium Silicate Hydrate **CAS #:** 14807-96-6 **% by Wt.:** <8.1

OSHA PEL** 20MPPCF (TWA)
ACGIH TLV* 2.0mg/m³ (TWA)
*Respirable

Ingredient: Carbon Black **CAS #:** 1333-86-4 **% by Wt.:** <.8

OSHA PEL 3.5mg/m³ (TWA)
ACGIH TLV 3.5mg/m³ (TWA)
*Respirable
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5, 101357-30-6 **% by Wt.:** 42

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease. Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas.

Additional risk summary: This product contains Carbon Black. Carbon Black contains trace amounts of PNAs, strongly absorbed polynuclear aromatic compounds. Some PNAs in the non-absorbing form have been found to be carcinogenic.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, water, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions. Toxic sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Do not use polyvinyl chloride based materials for packaging.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7 - 9 @50g/L water in aqueous suspension
Boiling point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .3
Specific gravity: 2.8
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride. At temperatures in excess of 440 C° in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. Avoid contact with acids and fire.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

LD50 is greater than 10,000 mg/kg.

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly. Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains, and should not be disposed of where there is a risk of contact with acids.

14. Transport information

Ultramarine pigments are not classified as dangerous substances for supply or conveyance under U.S. or international shipping regulations. Do not transport with acids.

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP295
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III –
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 1.3 ppm
Cadmium	Less than 0.2 ppm
Chromium	5ppm
Mercury	Less than 1 ppm
Lead	7 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Chimayo
Product Code: CP255
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Carbon Black **CAS #:** 1333-86-4 **% by Wt.:** <.5 - 1
OSHA PEL: 3.5 mg/m³ (TWA)
ACGIH TLV: 3.5 mg/m³ (TWA)

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <.9 – 1.2

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <59.2 – 62.8

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 1 - 3

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <20.4 – 20.6

OSHA PEL** 20 MPPCF (TWA)

ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous:

% by Wt.: <14.3 – 15.3

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease

Additional risk summary: This product contains Carbon Black. Carbon Black contains trace amounts of PNAs, strongly absorbed polynuclear aromatic compounds. Some PNAs in the non-absorbing form have been found to be carcinogenic.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.4
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.5
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP255
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Cimarron
Product Code: CP190
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Barium Sulfate, Barytes (BASO4) **CAS #:** 7727-43-7 **% by Wt.:** <12.1

OSHA PEL** 5 mg/m³ (TWA)
ACGIH TLV * 10 mg/m³ (TWA)
*Total Dust
**Respirable Dust

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <3.9

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <59.0

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <2.3

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)

*Respirable

Non-Hazardous: **% by Wt.:** <5.8

OSHA PEL: N/A
ACGIH TLV: N/A

Ingredient: Magnesium Silicate **CAS #:** 14807-96-6 **% by Wt.:** <16.7

OSHA PEL** 20 mg/m³ (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6.4
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .8
Specific gravity: 3.1
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP190

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Colorado Red
Product Code: CP170
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244..9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** < .5

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Aluminum Oxide **CAS #:** 1344-28-1 **% by Wt.:** <1.2

OSHA PEL: N/A 15mg/m³ (total) (TWA)
ACGIH TLV: N/A 10mg/m³ (total) (TWA
OSHA TWA: 5mg/m³ (Respirable)

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <80.4

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.1

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <2.4

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <13.8

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.2
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: 1.1
Specific gravity: 4.1
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP170
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Dakota Red
Product Code: CP225
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** < .2

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <88.2

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.1

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <3.4

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <8.2

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.2
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.7
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP225
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: December 28, 2006 Date revised: December 9, 2008

Section I General Information

Product Name: Fairfield Green
Product Code: CP345
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.385.3441
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt:** <40.4

OSHA PEL* (TWA)
ACGIH TLV* (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5, 101357-30-6 **% by Wt.:** 53

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

Non-Hazardous: **% by Wt.:** <6.6

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift

sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information. **Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades. This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

Environmental hazards: None

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, water, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions. Toxic sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Material Safety Data Sheet

Date prepared: December 28, 2006 Date revised: December 9, 2008

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Do not use polyvinyl chloride based materials for packaging.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.5 @50g/L water in aqueous suspension
Boiling point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .3
Specific gravity: 2.3 – 2.4
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride. At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. Avoid contact with acids and fire.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

LD50 is greater than 10,000 mg/kg.

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Material Safety Data Sheet

Date prepared: December 28, 2006 Date revised: December 9, 2008

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly. Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains, and should not be disposed of where there is a risk of contact with acids.

13. Disposal Considerations

Dispose of in accordance with federal, state, and local regulations.

14. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III – delayed health hazard (manganese compounds approximately 16-22%)
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 1.9 ppm
Cadmium	Less than 0.3 ppm
Chromium	7.8ppm
Mercury	Less than 1 ppm
Lead	11 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

Label statement: CP345
Freight Classification: Iron Oxide, NOI

15 Transport Information

Ultramarine pigments are not classified as dangerous substances for supply or conveyance under U.S. or international shipping regulations. Do not transport with acids.

6. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 9, 2008

Section I General Information

Product Name: Georgia Clay
Product Code: CP300
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <97.0

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Non-Hazardous: **% by Wt.:** <3.0

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Incompatibility: Strong Oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing

Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.0
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: 1.0
Specific gravity: 4.9
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions
Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.
Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP300
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed

DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Guadalupe Dunes
Product Code: CP205
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Carbon Black **CAS #:** 1333-86-4 **% by Wt.:** < .6 – 1.1
OSHA PEL: 3.5 mg/m³ (TWA)
ACGIH TLV: 3.5 mg/m³ (TWA)

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** < .9 – 1.2

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <60.3 – 64.2

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.2 - .8

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <20.6 – 24.5

OSHA PEL** 20 MPPCF (TWA)

ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <13.7 – 14.8

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

Additional risk summary: This product contains Carbon Black. Carbon Black contains trace amounts of PNAs, strongly absorbed polynuclear aromatic compounds. Some PNAs in the non-absorbing form have been found to be carcinogenic.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.4
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.6
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP205
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Section I General Information

Product Name: Havasu
Product Code: CP270
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <30.1

OSHA PEL* (TWA)
ACGIH TLV* (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5 101357-30-6 **% by Wt.:** 65

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable**)**
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen**.**

Non-Hazardous: **% by Wt.:** <4.9

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for

Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades. This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

Environmental hazards: None

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, water, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions. Toxic sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Do not use polyvinyl chloride based materials for packaging.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 5.4 – 6.5 @50g/L water in aqueous suspension
Boiling point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .2
Specific gravity: 2.9
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride. At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. Avoid contact with acids and fire.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

LD50 is greater than 10,000 mg/kg.

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 9, 2008

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly. Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains, and should not be disposed of where there is a risk of contact with acids.

14. Transport information

Ultramarine pigments are not classified as dangerous substances for supply or conveyance under U.S. or international shipping regulations. Do not transport with acids.

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP270
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III – delayed health hazard (manganese compounds approximately 16-22%)
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 1.9 ppm
Cadmium	Less than 0.3 ppm
Chromium	7.8ppm
Mercury	Less than 1 ppm
Lead	11 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 9, 2008

Section I General Information

Product Name: Jasper
Product Code: CP325
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <51.6

OSHA PEL* (TWA)
ACGIH TLV* (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5 **% by Wt.:** 40
101357-30-6

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable**)**
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen**.**

Non-Hazardous:
% by Wt.: <8.4

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades. This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

Environmental hazards: None

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, water, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions. Toxic sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Do not use polyvinyl chloride based materials for packaging

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8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 5.4 – 6.5 @50g/L water in aqueous suspension
Boiling point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .3
Specific gravity: 3.3 -3.4
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride. At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. Avoid contact with acids and fire.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

LD50 is greater than 10,000 mg/kg.

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 9, 2008

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly. Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains, and should not be disposed of where there is a risk of contact with acids.

14. Transport information

Ultramarine pigments are not classified as dangerous substances for supply or conveyance under U.S. or international shipping regulations. Do not transport with acids.

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP325
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III – delayed health hazard (manganese compounds approximately 16-22%)
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 1.2 ppm
Cadmium	Less than 0.2 ppm
Chromium	4.8 ppm
Mercury	Less than 1 ppm
Lead	6.8 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: Kentucky Moon
Product Code: CP320
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Sodium Alumino Sulphosilicate	CAS #: 57455-37-5 101357-30-6	% by Wt.: 100

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades.

Environmental hazards: None

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

4. First aid measures

Skin contact: As with all powders, may cause irritation to sensitive skin. Wash with soap and water. If skin irritation persists, seek medical advice.

Eye contact: As with all powders, may cause irritation to eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If problem persists, seek medical advice.

Ingestion: Non-toxic – no action necessary

Inhalation: Non-toxic – no action necessary.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, water, or CO2. A water mist, fog, or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine powder: Avoid the use of high-pressure water, which could spread burning material and create hazardous conditions.

Hazardous Decomposition Products: Toxic, irritating sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Suitable breathing apparatus should be worn.

6. Accidental release measures

Personal precautions: No special precautions are necessary unless contact with acid or fire may occur, in which case suitable breathing apparatus should be worn.

Environmental precautions: Do not flush into surface water or sanitary sewer systems.

Methods for cleaning: Sweep up spills. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail.

7. Handling and storage

Handling: Avoid excessive dust generation, use appropriate dust control measures where necessary.

Storage: Store in a dry, well ventilated area. Do not store in areas where there is a risk of fire. Do not mix or store with acids

Packaging material: paper, polyethylene. Do not use polyvinyl chloride based materials.

8. Exposure Controls

Personal protection equipment: Use of a NIOSH approved dust respirator is recommended when exposure limits may be exceeded.

Eye protection: Wear safety goggles in windy conditions.

Hand protection: Plastic, cloth, or leather gloves

9. Physical and chemical properties

Appearance: Fine blue powder
Odor: None
pH: 6 to 9
Boiling point: N/A
Solubility: Insoluble in water and organic solvents
Decomposition Temperature: Loss of sulfur above 400° C
Specific gravity: 2.3 to 2.4
Tap density: N/A

10. Stability and reactivity

Stable in air at temperatures less than 350° C.

Conditions to avoid: At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas.

Materials to avoid: Acids, fire.

Hazardous decomposition products: Hydrogen sulfide gas, sulfur dioxide

11. Toxicological information

Non-toxic

Acute oral toxicity: LD50 is greater than 10,000 mg/kg

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly.

13 Disposal Considerations

Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains. Ultramarine pigments should not be disposed of where there is a risk of contact with acids.

14. Transport information

Classification data: Not classified as dangerous substances for supply or conveyance.

Do not transport with acids.

Label statement: CP320

15. Regulatory information

National Inventory Numbers:

TSCA (Toxic Substance Control Act) United States 57455-37-5

AICS (Australia) CAS #

DSL (Canada) CAS #

MITI (Japan) 1-22

EINECS (European Community) 3-099-283

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 3 ppm
Cadmium	Less than 0.5 ppm
Chromium	12 ppm
Mercury	Less than 1 ppm
Lead	17 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Lake Tahoe
Product Code: CP245
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Sodium Alumino Sulphosilicate	CAS #: 57455-37-5 101357-30-6	% by Wt.: 100

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades.

Environmental hazards: None

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

4. First aid measures

Skin contact: As with all powders, may cause irritation to sensitive skin. Wash with soap and water. If skin irritation persists, seek medical advice.

Eye contact: As with all powders, may cause irritation to eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If problem persists, seek medical advice.

Ingestion: Non-toxic – no action necessary

Inhalation: Non-toxic – no action necessary.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, water, or CO2. A water mist, fog, or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine powder: Avoid the use of high-pressure water, which could spread burning material and create hazardous conditions.

Hazardous Decomposition Products: Toxic, irritating sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Suitable breathing apparatus should be worn.

6. Accidental release measures

Personal precautions: No special precautions are necessary unless contact with acid or fire may occur, in which case suitable breathing apparatus should be worn.

Environmental precautions: Do not flush into surface water or sanitary sewer systems.

Methods for cleaning: Sweep up spills. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail.

7. Handling and storage

Handling: Avoid excessive dust generation, use appropriate dust control measures where necessary.

Storage: Store in a dry, well ventilated area. Do not store in areas where there is a risk of fire. Do not mix or store with acids

Packaging material: paper, polyethylene. Do not use polyvinyl chloride based materials.

8. Exposure Controls

Personal protection equipment: Use of a NIOSH approved dust respirator is recommended when exposure limits may be exceeded.

Eye protection: Wear safety goggles in windy conditions.

Hand protection: Plastic, cloth, or leather gloves

9. Physical and chemical properties

Appearance: Fine blue powder
Odor: None
pH: 6 to 9
Boiling point: N/A
Solubility: Insoluble in water and organic solvents
Decomposition Temperature: Loss of sulfur above 400 degrees C
Specific gravity: 2.25 to 2.35
Tap density: N/A

10. Stability and reactivity

Stable in air at temperatures less than 350 degrees C.

Conditions to avoid: At temperatures in excess of 440 degrees C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas.

Materials to avoid: Acids, fire.

Hazardous decomposition products: Hydrogen sulfide gas, sulfur dioxide

11. Toxicological information

Non-toxic

Acute oral toxicity:LD50 is greater than 10,000 mg/kg

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly.

13 Disposal Considerations

Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains. Ultramarine pigments should not be disposed of where there is a risk of contact with acids.

14. Transport information

Classification data: Not classified as dangerous substances for supply or conveyance.

Do not transport with acids.

Label statement: CP245

15. Regulatory information

National Inventory Numbers:

TSCA (Toxic Substance Control Act) United States 57455-37-5

AICS (Australia) CAS #

DSL (Canada) CAS #

MITI (Japan) 1-22

EINECS (European Community) 3-099-283

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

Material Safety Data Sheet

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California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 3 ppm
Cadmium	Less than 0.5 ppm
Chromium	12ppm
Mercury	Less than 1 ppm
Lead	17 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: Maunaloa
Product Code: CP305
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <98.3

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Non-Hazardous: **% by Wt.:** <1.7

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Incompatibility: Strong Oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.0
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .9
Specific gravity: 5.1
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions
Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.
Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 10, 2008

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP305
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Moab Red
Product Code: CP120
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Barium Sulfate, Barytes (BASO4) **CAS #**: 7727-43-7 **% by Wt** : <1.7

OSHA PEL**: 5 mg/m³ (TWA)
ACGIH TLV*: 10mg/m³ (TWA)
*Total Dust
**Respirable Dust

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <.3

OSHA PEL* 5mg/m³ (TWA)
ACGIH TLV* 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica.

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <4.0

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Aluminum Oxide **CAS #:** 1344-28-1 **% by Wt.:** <1.3

OSHA PEL: N/A 15mg/m³ (total) (TWA)
ACGIH TLV: N/A 10mg/m³ (total) (TWA
OSHA TWA: 5mg/m³ (Respirable)

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <73.2

OSHA PEL** (TWA)

ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.1

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <5.7

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <13.7

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.1
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: 1.2
Specific gravity: 3.9
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP120
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

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US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Mojave
Product Code: CP230
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Barium Sulfate, Barytes (BASO4) **CAS #:** 7727-43-7 **% by Wt.:** <12.1

OSHA PEL** 5 mg/m³ (TWA)
ACGIH TLV * 10 mg/m³ (TWA)
*Total Dust
**Respirable Dust

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <3.9

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <59.0

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <2.3

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)

*Respirable

Non-Hazardous: **% by Wt.:** <5.8

OSHA PEL: N/A
ACGIH TLV: N/A

Ingredient: Magnesium Silicate **CAS #:** 14807-96-6 **% by Wt.:** <16.7

OSHA PEL** 20 mg/m³ (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6.4
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .8
Specific gravity: 3.1
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP230

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Nantucket Sand
Product Code: CP125
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.5

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <40.7

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.5

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <47.0

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

Non-Hazardous: **% by Wt.:** <9.3

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Yellow powder
Odor: None
pH: 7.6
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .9
Specific gravity: 3.0
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP125

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Napa Olive
Product Code: CP130
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300 Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) as FE **CAS #:** 1309-37-1 **% by Wt.:** 92

OSHA PEL*
ACGIH TLV*
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <37

OSHA PEL* (TWA)
ACGIH TLV* (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Manganese Oxide **CAS #:** 1313-13-9 **% by Wt.:** < 9.1 – 12.5

OSHA PEL* 1.0mg/m³ (TWA)
OSHA PEL STEL* 3.0mg/m³ (TWA)
OSHA PEL CEILING* 5.0mg/m³ (TWA)
ACGIH TLV** .2 mg/m³ (TWA)
*Manganese Fume as Mn
**Manganese, elemental and inorganic compounds, as Mn

Ingredient: Silicon Dioxide **CAS #:** 7631-86-9 **% by Wt.:** Proprietary

OSHA PEL 6.0mg/m³ (TWA)
ACGIH TLV 10.0 mg/m³ (TWA)

Ingredient: Aluminum Oxide **CAS #:** 1344-28-1 **% by Wt.:** Proprietary

OSHA PEL** 10.0mg/m³ (TWA) Total Dust / Aluminum Oxide as Al
OSHA PEL** 5.0mg/m³ (TWA) Respirable Dust / Aluminum Oxide as Al**

ACGIH TLV 10.0 mg/m³ (TWA)
**Respirable limits for particles <10um, aerodynamic diameter.

Non-Hazardous: **% by Wt.:** <6.0

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m3 (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Chronic health hazards: Chronic overexposure to manganese and its compounds is potentially hazardous due to effects on the central nervous system. This occupational disease known as "Manganism," has been identified as occurring at levels well above the current recommended exposure dust limit.

Additional incompatibility: This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators
Other protective clothing or equipment: Provide an adequate exhaust system that is filtered, to avoid contaminating the environment. This must meet the TLV requirements in the work area. Eye wash stations and sinks should be available.

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7-10 @50g/L water in aqueous suspension
Boiling point: N/A
Melting point: 1800° F / 1000° C
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .3
Specific gravity: 4.5
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions
Additional Incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

Hazardous decomposition or by-products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP130
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
Reportable Ingredients: Manganese compounds, approximately .1 - .13% (Total Mn).
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Osage
Product Code: CP175
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <1

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <60.1

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <15.6

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <23.2

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.3
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.2
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no environmental threat if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP175
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: Painted Desert
Product Code: CP285
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <46.6

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Non-Hazardous: **% by Wt.:** <1.4

OSHA PEL: N/A
ACGIH TLV: N/A

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5, 101357-30-6 **% by Wt.:** <52

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades.

Environmental hazards: Poses no threat to the environment if disposed of responsibly.

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

Incompatibility: Strong Oxidizers, such as Chlorates, Bromates, and Nitrates. Contact with acids liberates hydrogen sulfide, a highly flammable toxic gas. This risk is greatly reduced with acid resistant grades.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: As with all powders, may cause irritation to sensitive skin. Wash with soap and water. If skin irritation persists, seek medical advice.

Eye contact: As with all powders, may cause irritation to eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If problem persists, seek medical advice.

Ingestion: Non-toxic – no action necessary

Inhalation: Non-toxic – no action necessary.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, water, or CO2. A water mist, fog, or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine powder: Avoid the use of high-pressure water, which could spread burning material and create hazardous conditions.

Hazardous Decomposition Products: Toxic, irritating sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Suitable breathing apparatus should be worn.

6. Accidental release measures

Personal precautions: No special precautions are necessary unless contact with acid or fire may occur, in which case suitable breathing apparatus should be worn.

Environmental precautions: Do not flush into surface water or sanitary sewer systems.

Methods for cleaning: Sweep up spills. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail.

7. Handling and storage

Handling: Avoid excessive dust generation, use appropriate dust control measures where necessary.

Storage: Store in a dry, well ventilated area. Do not store in areas where there is a risk of fire. Do not mix or store with acids

Packaging material: paper, polyethylene. Do not use polyvinyl chloride based materials.

8. Exposure Controls

Personal protection equipment: Use of a NIOSH approved dust respirator is recommended when exposure limits may be exceeded.

Eye protection: Wear safety goggles in windy conditions.

Hand protection: Plastic, cloth, or leather gloves

9. Physical and chemical properties

Appearance: Fine blue powder

Odor: None
pH: 6 to 9
Boiling point: N/A
Solubility: Insoluble in water and organic solvents
Decomposition Temperature: Loss of sulfur above 400° C
Specific gravity: 3.6
Tap density: 1.0

10. Stability and reactivity

Stable in air at temperatures less than 350° C.

Conditions to avoid: At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas.

Materials to avoid: Acids, fire.

Hazardous decomposition products: Hydrogen sulfide gas, sulfur dioxide

11. Toxicological information

Non-toxic
Acute oral toxicity:LD50 is greater than 10,000 mg/kg

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly.

13 Disposal Considerations

Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains. Ultramarine pigments should not be disposed of where there is a risk of contact with acids.

14. Transport information

Classification data: Not classified as dangerous substances for supply or conveyance.
Do not transport with acids.
Label statement: CP285

15. Regulatory information

National Inventory Numbers:

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 10, 2008

TSCA (Toxic Substance Control Act) United States 57455-37-5
AICS (Australia) CAS #
DSL (Canada) CAS #
MITI (Japan) 1-22
EINECS (European Community) 3-099-283

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 1.6 ppm
Cadmium	Less than 0.3 ppm
Chromium	6.2 ppm
Mercury	Less than 1 ppm
Lead	8.8 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: Palomino Valley
Product Code: CP280
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica **CAS #:** 14808-60-7 **% by Wt.:** <2.7

OSHA PEL* .10mg/m³ (TWA)
ACGIH TLV* .05mg/m³ (TWA)

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <87

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesium Silicate **CAS #:** 14807-96-6 **% by Wt.:** <2.3

OSHA PEL** 20MPPCF (TWA)
ACGIH TLV** 2.0mg/m³ (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Non-Hazardous: **% by Wt.:** <8.4

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

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Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6.3
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .6
Specific gravity: 3.4
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

Material Safety Data Sheet

Date prepared: August 1, 2006 Date revised: December 10, 2008

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP280
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Powder River
Product Code: CP185
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Sodium Alumino Sulphosilicate	CAS #: 57455-37-5 101357-30-6	% by Wt.: 100

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Physical / Chemical Hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades.

Environmental hazards: None

Human Health Hazards: Can create nuisance dust. Persons suffering from chronic respiratory diseases such as asthma may be at increased risk.

4. First aid measures

Skin contact: As with all powders, may cause irritation to sensitive skin. Wash with soap and water. If skin irritation persists, seek medical advice.

Eye contact: As with all powders, may cause irritation to eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If problem persists, seek medical advice.

Ingestion: Non-toxic – no action necessary

Inhalation: Non-toxic – no action necessary.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, water, or CO2. A water mist, fog, or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine powder: Avoid the use of high-pressure water, which could spread burning material and create hazardous conditions.

Hazardous Decomposition Products: Toxic, irritating sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Suitable breathing apparatus should be worn.

6. Accidental release measures

Personal precautions: No special precautions are necessary unless contact with acid or fire may occur, in which case suitable breathing apparatus should be worn.

Environmental precautions: Do not flush into surface water or sanitary sewer systems.

Methods for cleaning: Sweep up spills. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail.

7. Handling and storage

Handling: Avoid excessive dust generation, use appropriate dust control measures where necessary.

Storage: Store in a dry, well ventilated area. Do not store in areas where there is a risk of fire. Do not mix or store with acids

Packaging material: paper, polyethylene. Do not use polyvinyl chloride based materials.

8. Exposure Controls

Personal protection equipment: Use of a NIOSH approved dust respirator is recommended when exposure limits may be exceeded.

Eye protection: Wear safety goggles in windy conditions.

Hand protection: Plastic, cloth, or leather gloves

9. Physical and chemical properties

Appearance: Fine blue powder
Odor: None
pH: 6 to 9
Boiling point: N/A
Solubility: Insoluble in water and organic solvents
Decomposition Temperature: Loss of sulfur above 400° C
Specific gravity: 2.3 to 2.4
Tap density: N/A

10. Stability and reactivity

Stable in air at temperatures less than 350° C.

Conditions to avoid: At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas.

Materials to avoid: Acids, fire.

Hazardous decomposition products: Hydrogen sulfide gas, sulfur dioxide

11. Toxicological information

Non-toxic

Acute oral toxicity:LD50 is greater than 10,000 mg/kg

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly.

13 Disposal Considerations

Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains. Ultramarine pigments should not be disposed of where there is a risk of contact with acids.

14. Transport information

Classification data: Not classified as dangerous substances for supply or conveyance.

Do not transport with acids.

Label statement: CP185

15. Regulatory information

National Inventory Numbers:

TSCA (Toxic Substance Control Act) United States 57455-37-5

AICS (Australia) CAS #

DSL (Canada) CAS #

MITI (Japan) 1-22

EINECS (European Community) 3-099-283

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 3 ppm
Cadmium	Less than 0.5 ppm
Chromium	12ppm
Mercury	Less than 1 ppm
Lead	17 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Rio Grande Pecan
Product Code: CP135
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <3.4

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <88.1

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Non-Hazardous: **% by Wt.:** <3.4

OSHA PEL: N/A
ACGIH TLV: N/A

Ingredient: Magnesium Silicate **CAS #:** 14807-96-6 **% by Wt.:** <5.1

OSHA PEL** 20 mg/m³ (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz

may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40

CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Storage at temperatures above 300° F may cause the black iron oxide component in this product to oxidize, generating heat. This may cause surrounding combustibles to ignite.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 5.6
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .5
Specific gravity: 3.3
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP135

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Sanibel Sunset
Product Code: CP140
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <90

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Non-Hazardous: **% by Wt.:** <10

OSHA PEL: N/A
ACGIH TLV: N/A

OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)
Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing

Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.0
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .6
Specific gravity: 4.4
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions
Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.
Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP140
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Santa Fe Tan
Product Code: CP145
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.6

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <45.6

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < .5

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <42.8

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

Ingredient: Aluminum Oxide **CAS #:** 1344-28-1 **% by Wt.:** <1.0

OSHA PEL** 15mg/m³ (TWA)
ACGIH TLV* 10.0 mg/m³ (TWA)

Non-Hazardous: **% by Wt.:** <8.5

OSHA PEL: N/A

ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases, such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.9
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .9
Specific gravity: 3.1
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP145

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Savannah Moss
Product Code: CP235
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <1.0

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <60.1

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <15.6

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <23.1

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See*: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.3
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.2
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment when disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP235
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: Snake River
Product Code: CP310
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <35.3

OSHA PEL* (TWA)
ACGIH TLV* (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5 101357-30-6 **% by Wt.: <59**

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable**)**
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen**.**

Non-Hazardous: **% by Wt.: <**5.7

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift

sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas.

Additional incompatibility: This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, water, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions. Toxic sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Do not use polyvinyl chloride based materials for packaging.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6 – 9 @50g/L water in aqueous suspension
Boiling point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .2
Specific gravity: 3.0
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride. At temperatures in excess of 440°C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. Avoid contact with acids and fire.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

LD50 is greater than 10,000 mg/kg.

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly. Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains, and should not be disposed of where there is a risk of contact with acids.

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 10, 2008

14. Transport information

Ultramarine pigments are not classified as dangerous substances for supply or conveyance under U.S. or international shipping regulations. Do not transport with acids.

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP310
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III – delayed health hazard (manganese compounds approximately 16-22%)
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 1.8 ppm
Cadmium	Less than 0.3 ppm
Chromium	7ppm
Mercury	Less than 1 ppm
Lead	10 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Socorro Clay
Product Code: CP155
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Barium Sulfate, Barytes (BASO4) **CAS #**: 7727-43-7 **% by Wt** : <9.3

OSHA PEL**: 5 mg/m³ (TWA)
ACGIH TLV*: 10mg/m³ (TWA)
*Total Dust
**Respirable Dust

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.7 – 2.8

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <65.7 – 67.2

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Kaolin **CAS #:** 1332-58-7 **% by Wt.:** <1.4

OSHA PEL* 5mg/m³ (TWA)
ACGIH TLV* 2mg/m³ (TWA)
*Respirable fraction for product with <1% crystalline silica.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** < 0.0 – 0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <10.6 – 11.2

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)
*Respirable
** Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an Iron Oxide fume or gas, these limits apply.

Non-Hazardous: **% by Wt.:** <8.0 – 9.5

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.
Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6.5
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .8
Specific gravity: 3.7
Solubility: N/A

10. Stability and reactivity

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP155
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: December 1, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: Sugarloaf White
Product Code: CP340
Product Description: White Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Titanium dioxide pigment

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113
Vox: 505.385.3441
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredients:	% by Wt:	CAS #:	OSHA PEL**:	ACGIH TLV**:
Titanium dioxide	80 – 99.5	13463-67- 7	15mg/m³, total dust, 8h TWA	10 mg/m³, total dust, 8h TWA
LMPE Mexico: 10 mg/m³, total dust, 8h LMPE-PPT **Mexico**: 20 mg/m³, total dust, 15 minute, LMPE-CT				
Aluminum Oxide	0-7	1344-28-1	15mg/m³, total dust, 8h TWA 5 mg/m³, resp. dust, 8h TWA	10 mg/m³, total dust, 8h TWA
LMPE Mexico: 10 mg/m³, inhalable dust, 8h LMPE-PPT				
Silica, amorphous	0-11	7631-86-9	80mg/m³, %SiO_2, 8h TWA	10mg/m³, inhalable dust, 8h TWA 3mg/m³, resp. dust, 8h TWA
LMPE Mexico: 10 mg/m³, inhalable dust, 8h LMPE-PPT **Mexico**: 3 mg/m³, resp. 8h LMPE-PPT **REL (NIOSH):** 6mg/m³, 10h TWA				

Ingredients:	% by Wt:	CAS #:	OSHA PEL**:	ACGIH TLV**:
Zirconium Oxide	0-2	1314-23-4	5 mg/m³, 8h TWA	5 mg/m³, 8h TWA

LMPE Mexico: 5 mg/m³, 8h LMPE-PPT
Mexico: 10 mg/m³, 15 minute, LMPE-CT
STEL (ACGIH): 10 mg/m³, 15-minute, STEL
REL (NIOSH): 5mg/mg³, 10h TWA
STEL (NIOSH): 10 mg/m³, 15 minute, STEL

NFPA/HMIS: Health – 2, Fire – 0, Reactivity – 0, Specific Hazard

- **OSHA: Table Z-1 abd Z-3 Limits for Air Contaminants (June 30, 1993)(29 CFR 1910.1000)(1971 PELs)**
- **ACGIH: Threshold limit Values (2004)**
- **Mexico OELs: NOM-010-STPS-1999, Diario Oficial de la Federación, 13 Marzo 2000**

LMPE: Límites Máximos Permisibles de Exposición
LMPE-PPT: Límite Máximo Permisible de Exposición Promedio Ponderado en el Tiempo
LMPE-CT: Límite Máximo Permisible de Exposición de Corto Tiempo

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Overexposure by inhalation may induce upper respiratory irritation. Likely routes of exposure: eye contact, skin contact, inhalation of airborne dust. Overexposure may cause irritation to eyes, skin, or lungs.

This product does not contain components that are listed as suspected or known carcinogens by NTP, OSHA, ACGIH or IARC.
This product is considered hazardous by OSHA Hazard Communication Standard. (29 CFR 1910.1200)
Potential environmental effects: No significant environmental effects are anticipated

4. First aid measures

Skin contact: Wash with soap and water.
Eye contact: Wash with water or neutral eyewash solution.
Ingestion: Do not induce vomiting. Give up to 200 ml water. In case of persistent symptoms, consult a doctor.
Inhalation: Move to a fresh air atmosphere. Give symptomatic treatment as necessary.

5. Fire fighting measures

Product is inert, non flammable and non combustible.
Suitable extinguishing media: Use any media appropriate for combustible material in the area.
Required special protective equipment for fire-fighters: As in any fire, wear a self-contained breathing apparatus with a full facepiece operated in pressure-demand or positive-pressure mode and full firefighting turn out gear.

6. Accidental release measures

Personal precautions: Avoid raising and breathing dust. Ensure adequate ventilation. Wear personal protective equipment.
Environmental precautions: Product is inert. No specific risk for the environment. Prevent runoff from entering storm sewers and ditches which lead to natural waterways.
Cleaning methods: Vacuum or sweep, but avoid dusting during clean-up. The product can cause slippery conditions if wet.

7. Handling and storage

Handling: Avoid raising and breathing dust.
Handling systems and areas should be operated to minimize dust.
Emptying of flexible intermediate bulk containers (FIBCs) can cause static electricity.
Empty FIBCs by gravity only (do not empty pneumatically). Remove all wrapping prior to emptying FIBCs.
Offloading from bulk tankers can generate static electricity. Systems should be adequately earthed and provide an earthing point for tankers.
In the manufacture of this product, it is packaged at temperatures of approximately 100 to 120°C. When pigment is shipped shortly after manufacture, it may stay hot for a long time, depending on ambient temperatures and inventory storage practices. Due to the potential of elevated pigment temperature, caution should be used while handling pigment and in solvent applications.
Storage: Pigments should not be stored in outside areas exposed to the weather. Care should be taken to avoid exposure to moisture, particularly with a partly used pallet of material.

Material Safety Data Sheet

Date prepared: December 1, 2006 Date revised: December 10, 2008

8. Exposure Controls

Engineering measures: Good natural ventilation will be sufficient in most cases. Provide local exhaust ventilation system to meet exposure limits.
Skin protection: Avoid prolonged exposure by wearing protective gloves and clothing.
Eye protection: Wear safety glasses with side shields.
Respiratory protection: Use an approved dust respirator.
Hygiene measures: Practice common good industrial hygiene.

9. Physical and chemical properties

Appearance: Solid white powder
Odor: May have a characteristic odor
pH: 5.0 – 10.0 (aqueous dispersion)
Boiling point: N/A
Melting point: about 1800°C
Flashpoint: N/A
Explosive properties: N/A
Vapor pressure: N/A
Relative density: N/A
Specific gravity: 3.5 – 4.2 g/cm³/ 29.2 -35 lbs./Gal @ 20℃
Solubility: Insoluble in water and organic solvents
Partition coefficient: n-octanol/water: No data available
VOCs: None
Percent volatile: <2%

10. Stability and reactivity

Conditions to avoid: None known
Materials to avoid:
Hazardous decomposition products: At high temperature, decomposition products could include traces of alpha-ethylacrolein and formaldehyde.

11. Toxicological information

Acute toxicity: Oral LD_{50} (Rat): >10,000 mg/kg
Dermal LD_{50} (Rabbit): >10,000 mg/kg
Inhalation LC_{50}/4 Hour (Rat): > 6.8 mg/l
Chronic effects: No data for reproductive and developmental effects. Negative in Ames test with and without metabolic activation.

12. Ecological information

Product is not volatile, but may be scattered by generation of dust during handling.
Insoluble in aquatic systems. Non biodegradable.

13. Disposal Considerations

Dispose of in compliance with federal, state and local regulations.

14. Transport information

Titanium dioxide pigments are not classified according to the recommendation of the UN and not regulated as hazardous material by DOT, IMO, or TDG

15. Regulatory information

TSCA: All ingredients are on the inventory or exempt from listing. No specific regulations apply.
SARA Title III: Not listed
Section 313: N/A
Section 302/304: N/A
California Proposition 64: Titanium dioxide is not known to the State of California to cause cancer.
Canadian SIMDUT Classification: Not regulated
Canadian DSL/NDSL: All ingredients are listed.
Australia AICS: All ingredients are listed.
Japanese ENCS: All ingredients are listed.
Europe EINECS: Registered
European Directive 67/548/EEC: Not classified as a hazardous substance.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

While the information and recommendations in this publication are given in good faith, in all cases, it is the responsibility of the user to determine the accuracy and applicability of such information and recommendations and the suitability of any product for its own particular purpose.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Sulfur Spring
Product Code: CP260
Product Description: Powder
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Crystalline Silica, Quartz **CAS #:** 14808-60-7 **% by Wt.:** <2.3 – 2.8

OSHA PEL*: 0.10 mg/m³ (TWA)
ACGIH TLV*: 0.05 mg/m³ (TWA)
*Respirable limits for particles <10 um AD.

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <65 - 70

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Magnesite **CAS #:** 546-93-0 **% by Wt.:** <0.0 – 0.2

OSHA PEL* 5 mg/m³ (TWA)
ACGIH TLV 10 mg/m³ (TWA)
*Respirable

Ingredient: Magnesium silicate **CAS #:** 14807-96-6 **% by Wt.:** <10 - 12

OSHA PEL** 20 MPPCF (TWA)
ACGIH TLV* 2.0 mg/m³ (TWA)

Non-Hazardous: **% by Wt.:** <15 – 20

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Specific hazards: This product contains crystalline silica, an IARC probable carcinogen. Long-term repeated exposure to excessive levels of crystalline silica dust may cause silicosis, a progressive and sometimes fatal lung disease.

Incompatibility: Strong oxidizers, such as Chlorates, Bromates, and Nitrates.

Additional incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid, and Bromine Pentafluoride.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide

proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Yellow powder
Odor: None
pH: 5.8
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .7
Specific gravity: 3.6
Solubility: N/A

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: None

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: None
Technical shipping name: Inorganic pigment
Label statement: CP260

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed on TSCA Inventory
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Taos
Product Code: CP220
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <30.1

OSHA PEL* (TWA)
ACGIH TLV* (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5 101357-30-6 **% by Wt.:** 65

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable)
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

Non-Hazardous: **% by Wt.:** <4.9

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³(Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift

sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. May irritate pre-existing respiratory diseases such as asthma.

Additional Incompatibility: This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride. Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades.

Chronic health hazards: Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, water, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions. Toxic sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Do not use polyvinyl chloride based materials for packaging.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6-9 @50g/L water in aqueous suspension
Boiling point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .5
Specific gravity: 2.9
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride. At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. Avoid contact with acids and fire.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

LD50 is greater than 10,000 mg/kg.

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly. Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains, and should not be disposed of where there is a risk of contact with acids.

14. Transport information

Ultramarine pigments are not classified as dangerous substances for supply or conveyance under U.S. or international shipping regulations. Do not transport with acids.

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP220
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III – EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 2 ppm
Cadmium	Less than 0.3 ppm
Chromium	7.8ppm
Mercury	Less than 1 ppm
Lead	11 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Tucson Gold
Product Code: CP160
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <86

OSHA PEL** (TWA)
ACGIH TLV** (TWA)
**Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Non-Hazardous: **% by Wt.:** <14

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³(Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Incompatibility: This material contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride..

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing

Eye protection: Protective goggles

Hand protection: Gloves

Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.

Inhalation measures: Approved dust respirators

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7.0
Boiling point: N/A
Melting point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .5
Specific gravity: 4.0
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions
Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.
Hazardous decomposition products: None

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP160
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III, Section 313: Not Listed
EINECS (European Community)

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 10, 2008

Section I General Information

Product Name: Verde Valley
Product Code: CP315
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** <27.5

OSHA PEL* (TWA)
ACGIH TLV* (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Sodium Alumino Sulphosilicate **CAS #:** 57455-37-5 **% by Wt.:** 68
101357-30-6

ACGIH* 10mg/cu.m (Total)
5mg/cu.m (Respirable**)**
*Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen**.**

Non-Hazardous: **% by Wt.:** <4.5

OSHA PEL: N/A
ACGIH TLV: N/A

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 10, 2008

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. May irritate pre-existing respiratory diseases such as asthma.

Additional Incompatibility: This product contains Synthetic Iron Oxide which is incompatible with Hydrazine, Calcium Hypochlorite, Performic Acid and Bromine Pentafluoride. Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is greatly reduced with acid resistant grades.

Chronic health hazards: Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, water, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions. Toxic sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s). Do not use polyvinyl chloride based materials for packaging.

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 6 - 9 @50g/L water in aqueous suspension
Boiling point: N/A
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density: .2
Specific gravity: 2.9
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride. At temperatures in excess of 440° C in the presence of air an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. Avoid contact with acids and fire.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

LD50 is greater than 10,000 mg/kg.

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Material Safety Data Sheet

Date prepared: June 15, 2006 Date revised: December 10, 2008

Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. Ultramarine pigments pose no threat to the environment if disposed of responsibly. Dispose of in accordance with federal, state, and local regulations. Ultramarine pigments should not be washed into waste water or drains, and should not be disposed of where there is a risk of contact with acids.

14. Transport information

Ultramarine pigments are not classified as dangerous substances for supply or conveyance under U.S. or international shipping regulations. Do not transport with acids.

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP315
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III – delayed health hazard (manganese compounds approximately 16-22%)
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

California Proposition 65: Ultramarine pigments may contain the following proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

Arsenic	Less than 2 ppm
Cadmium	Less than 0.3 ppm
Chromium	8.2ppm
Mercury	Less than 1 ppm
Lead	11.6 ppm
Beryllium	Not detected
Nickel	Less than 1 ppm

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY
US Patent No. 7485186 B2
Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 30, 2004 Date revised: December 10, 2008

Section I General Information

Product Name: Wild Horse Smoke
Product Code: CP165
Product Description: Blend of inorganic pigments
Product Use: Colorant for American Clay Plasters and Sealers
Chemical Family: Inorganic Pigment(s)

Manufacturer: American Clay Enterprises, LLC
8724 Alameda Park NE
Albuquerque, NM 87113

Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredient: Iron Oxide (FUME) – FE203 **CAS #:** 1309-37-1 **% by Wt.:** Proprietary

OSHA PEL* 10.0mg/m³ (TWA)
ACGIH TLV* 5.0mg/m³ (TWA)
*Under normal conditions, when this material is used as a pigment, no hazardous conditions exist. If this material is heated to produce an iron oxide fume or gas, ACGIH has issued a TLV of 5mg/m³ and OSHA has set a PEL of 10mg/m³.

Ingredient: Manganese Oxide **CAS #:** 1313-13-9 **% by Wt.:** < 16-22

OSHA PEL* 1.0mg/m³ (TWA)
OSHA PEL STEL* 3.0mg/m³ (TWA)
OSHA PEL CEILING* 5.0mg/m³ (TWA)
ACGIH TLV** .2 mg/m³ (TWA)
*Manganese Fume as Mn
**Manganese, elemental and inorganic compounds, as Mn

Ingredient: Silicon Dioxide **CAS #:** 7631-86-9 **% by Wt.:** Proprietary

OSHA PEL 6.0mg/m³ (TWA)
ACGIH TLV 10.0 mg/m³ (TWA)

Ingredient: Aluminum Oxide **CAS #:** 1344-28-1 **% by Wt.:** Proprietary

OSHA PEL** 10.0mg/m³ (TWA) Total Dust / Aluminum Oxide as Al
OSHA PEL** 5.0mg/m³ (TWA) Respirable Dust / Aluminum Oxide as Al**
ACGIH TLV 10.0 mg/m³ (TWA)
**Respirable limits for particles <10um, aerodynamic diameter.

Nuisance Dust – This material is considered a nuisance dust. Please also observe the following exposure limits:
OSHA PEL15mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

- **WARNING:** This product contains a small amount of quartz that may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for quartz may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to humans (volume 68, 1997) concludes that quartz is carcinogenic to humans (IARC classification 1).
- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OSHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05mg/m³) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Eye & skin contact may cause irritation. Prolonged inhalation at excessive dust levels may cause damage to the lungs and respiratory tract. May irritate pre-existing respiratory diseases such as asthma.

Chronic health hazards: Chronic overexposure to manganese and its compounds is potentially hazardous due to effects on the central nervous system. This occupational disease known as "Manganism", has been identified as occurring at levels well above the current recommended exposure dust limit.

4. First aid measures

Skin contact: Wash with mild soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the event that irritation occurs.

Eye contact: Flush thoroughly with large amounts of water. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water, give subject water to drink and do not induce vomiting. Seek medical help.

Inhalation: Remove to fresh air and get medical help for any breathing difficulties.

5. Fire fighting measures

Suitable extinguishing media: Dry chemical, foam, or CO2. A water mist, fog or spray can be used to control dusting and cool the material.

Special hazards in fire: This material is a very fine dust: Avoid the use of high-pressure water, which could spread burning material and create hazardous dust conditions.

Required special protective equipment for fire-fighters: Firefighters should wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures/ disposal measures

Personal precautions: NIOSH approved dust respirator suggested. Approved dust respirators are required when dust exceeds recommended TLV. Safety glasses with side shields or goggles are suggested. Cloth, leather, rubber, or plastic gloves are recommended.

Environmental precautions: Provide an adequate exhaust system that is filtered to avoid contaminating the environment, and that meets the TLV requirements in the work area.

Disposal: Vacuum or scoop up spilled material and dispose in an appropriate waste container. Misting with water or absorbent dust control products may help to keep airborne dust levels at a minimum. Provide proper ventilation and personal protection equipment for use during clean-up. Waste material can be buried in an approved landfill in accordance with Federal, State, and Local environmental regulations. According to 40 CFR, Part 261 of the Resource, Conservation, and Recovery Act (RCRA), this product is not classified as a hazardous material.

7. Handling and storage

Handling: Provide adequate ventilation when handling this material. Material may become slippery when wet. Avoid unnecessary contact; wash thoroughly after handling. Keep material away from food and beverages.

Storage: Store in a dry place at an ambient temperature and away from food and beverages. Keep material in closed container(s).

8. Exposure Controls

Personal protection equipment: Protective clothing
Eye protection: Protective goggles
Hand protection: Gloves
Hygiene measures: Wash skin thoroughly with soap and water after contact with this material.
Inhalation measures: Approved dust respirators

9. Physical and chemical properties

Appearance: Powder
Odor: None
pH: 7-10 @50g/L water in aqueous suspension
Boiling point: N/A
Melting point: 1800° F / 1000° C
Flashpoint: None
Explosive properties: N/A
Vapor pressure: N/A
Tap density:
Specific gravity: 4.8
Solubility: Insoluble

10. Stability and reactivity

Stability: Stable under normal conditions

Materials to avoid: Strong oxidizers, such as chlorates, bromates, and nitrates. This material contains synthetic iron oxide which is incompatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Hazardous decomposition products: Thermal decomposition may produce potentially toxic fumes.

11. Toxicological information

HAZARDOUS MATERIAL IDENTIFICATION SYSTYM (HMIS)

Hazard rating:	Health: 1
4 = Severe	Flammability: 0
3 = Serious	Reactivity: 0
2 = Moderate	Personal Protection: (glasses, gloves, dust respirator)
1 = Slight	
0 = Minimal	

12. Ecological information

Poses no threat to the environment if disposed of responsibly.

14. Transport information

D.O.T. Hazardous Classification: Non-regulated
D.O.T. Label required: None
D.O.T. Shipping name: N/A
Technical shipping name: Inorganic pigment
Label statement: CP165
Freight Classification: Iron Oxide, NOI

15. Regulatory information

TSCA (Toxic Substance Control Act) United States Listed
DERCLA (Comprehensive Response Compensation and Liability Act) No reportable quantity
DSL (Canada) Listed
SARA Title III – delayed health hazard (manganese compounds approximately 16-22%)
EINECS (European Community) Listed

Reasons for issue: Compliance with 29 CFR, Part 1910.1200.

16. Other Information

The data and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

MATERIAL SAFETY

DATA SHEETS:

LIME PUTTY

AMERICAN CLAY

US Patent No. 7485186 B2

Naturally Beautiful Walls

Material Safety Data Sheet

Date prepared: January 21, 2010 Date revised: March 29, 2010

Section I General Information

Product Name: American Clay Lime Putty

Formula: Slaked Lime Putty

Manufacturer: American Clay, LLC
8724 Alameda Park Drive Suite F
Albuquerque, NM 87113
Vox: 505.243.5300
Fax: 505.244.9332

Section II Hazardous Ingredients

Ingredients:	% by Wt:	CAS #:	OSHA PEL**:	ACGIH TLV**:
Calcium Hydroxide	94-97	1305-62-0	5 mg/m3	5 mg/m3
Magnesium Hydroxide	.01-.3	1309-42-8	n/a	n/a
Calcium Carbonate	2.5-5.5	1317-65-3	5 mg/m3	10 mg/m3

NFPA/HMIS: Health – 1, Fire – 0, Reactivity – 0, Specific Hazard – *see section VI*

- **Note:** The Permissible Exposure Limits (PELs) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the United States Circuit Court of Appeals for the 11th Circuit. Federal OAHA is now enforcing these PELs. More restrictive exposure limits may be enforced by some other jurisdictions. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50micrograms respirable free silica per cubic meter of air (0.05mg/m3) as determined by full shift sample up to a 10-hour working day, 40 hours per week. *See:* 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica for more detailed information.

**Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted average (TWA).

3. Hazards Identification

Most important hazards: Hydrated Lime is an odorless white putty. Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract.

Specific hazards:

Eyes – Contact can cause severe irritation or burning of the eyes, including permanent damage.

Skin – Contact can cause severe irritation or burning of the skin, especially in the presence of moisture.
Ingestion – This product can cause severe irritation or burning of the gastrointestinal tract if swallowed.
Inhalation – This product can cause irritation of the respiratory system. Long-term exposure may cause permanent damage. Hydrated Lime is not listed by MSHA, OSHA, or IARC as carcinogen

Medical conditions aggravated by exposure: Contact may aggravate disorders of eyes, skin, gastrointestinal tract, and respiratory system.
Potential environmental issues: This material is alkaline and if released into the water or moist soil, it will cause an increase in pH.

4. First aid measures

Eye contact: Immediately flush eyes with generous amounts of water for at least 15 minutes. Pull back the eyelid to ensure that all lime dust has been washed out. Seek medical attention if necessary. Do not rub eyes.
Skin contact: Wash exposed areas with large amounts of water. Seek medical attention if necessary.
Ingestion: Do not induce vomiting. Seek medical attention immediately. Never give anything by mouth unless instructed to do so by medical personnel.
Inhalation: Move victim to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.

5. Fire fighting measures

Fire hazards: Hydrated Lime is not combustible or flammable.
Hazardous combustion products: none
Extinguishable media: Use dry chemical fire extinguisher. Large amounts of water may be used to deluge small quantities of hydrated lime.
Fire fighting instructions: Keep personnel away from and upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

6. Accidental release measures

Spill/leak procedure: Do NOT use water on bulk material spills. Use proper protective equipment.
Small spills: Use dry method to collect spilled materials. Avoid generation of dust. Do not clean up materials with compressed air. Store collected materials in dry, sealed plastic or metal containers. Residue on surfaces may be washed with water.
Large spills: Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure. Store spilled materials in dry, sealed plastic or metal containers.
Containment: For large spills, as much as possible, avoid the generation of dusts. Prevent release to sewers or waterways.
Cleanup: Residual amounts of material can be flushed with large amounts of water. Equipment can be washed with either a mild vinegar solution, or detergent and water.

7. Handling and storage

Handling: Keep in tightly closed containers. Protect containers from physical damage. Avoid direct skin contact with the material.

Storage: Store in cool, dry, and well-ventilated location. Do not store near incompatible materials. Keep away from moisture. Do not store or ship in aluminum containers.

8. Exposure Controls

Engineering controls: Provide ventilation adequate to maintain PELs.
Respiratory protection: Use N1OSH/MSHA approved respirators if airborne concentrations exceed PEL.
Skin protection: Use appropriate gloves to protect skin contact. Clothing should fully cover arms and legs.
Eye protection: Use safety glasses with side shields or safety goggles. Contact lenses should not be worn when working with lime products.
Other: Eye wash fountain and emergency showers are recommended.

9. Physical and chemical properties

Appearance: white putty
Odor: odorless
pH: 12.45
Boiling point: 100ºC
Specific Gravity: 1.5-1.9
Melting point: n/a
Vapor pressure: n/a
Solubility: negligible, 0.07-0.185

10. Stability and reactivity

Stability: Chemically stable. See also incompatibility below.
Incompatibility/conditions to avoid: Hydrated lime should not be mixed with or stored with the following materials, due to potential for violent reaction and release of heat: acids, reactive fluoridated compounds, reactive brominated compounds, reactive powdered metals, organic acid anhydrides, nitro-organic compounds, reactive phosphorous compounds, and interhalogenated compounds. Hydrofluoric acid dissolves silica to product the corrosive gas silicon tetrafluoride.
Hazardous decomposition products: Calcium Hydroxide decomposes at 540°C to produce Calcium Oxide.
Hazardous Polymerization: none

11. Toxicological information

No LD50/LC50 have been identified for this product's components. Hydrated Lime is not listed by MSHA, OSHA, or IARC as carcinogen.

12. Ecological information

Ecotoxicity: Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems in high concentrations.
Environmental fate: This material shows no bioaccumulation effect or food chain concentration toxicity.

13 Disposal Considerations

Dispose of in accordance with all applicable federal, state, and local environmental regulations. If this product as supplied and unmixed becomes a waste, it will not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act.

14. Transport information

Hydrated lime is not classified as a hazardous material by DOT.

15. Regulatory information

EPA Regulations:

RCRA Hazardous Waste Number: not listed (40 CFR 261.33)
RCRA Hazardous Waste Classification: not classified (40 CFR 261)
CERCLA Hazardous Substance: (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA Sec. 307 (a), CAA, Se. 112
CERCAL Reportable Quantity (RQ): not listed
SARA 311/312 Codes: not listed
SARA Toxic Chemical: (40 CFR 372.65) not listed
SARA EHS (Extremely Hazardous Substance): (40 CFR 355) not listed, Threshold Planning Quantity (TPQ) not listed
**All chemical ingredients are listed on the USEPA TSCA Inventory List.*

OSHA/MSHA Regulations:

Air Contaminant: (29 CFR 1910.1000, Table Z-1, Z-1A) 5 mg/m3 TWA-B
MSHA: not listed
OSHA Specifically Regulated Substance: (29 CFR 1910) not listed
State Regulations: Consult state and local authorities for guidance.

16. Other Information

HMIS: Health Risks 1, Flammability 0, Reactivity 0, Personal Protection, E
NFPA: Health Hazard 1, Fire Hazard 0, Reactivity 0
WHMIS Classification: "E" Corrosive Materials
WHMIS Classification: "D2A" Materials causing other toxic effect.

*Be sure to make all employees, users, and customers aware of the hazards that are associated with this product and the required precautions for its use.

Material Safety Data Sheet

Date prepared: January 21, 2010 Date revised: March 29, 2010

**Note: The information given and recommendations made in this document are based on our own research and the research of others, and are believed to be accurate. American Clay makes no guarantee or warranty, either expressed or implied, as to the accuracy or completeness of the data and recommendations.

-END OF DOCUMENT-

AMERICAN CLAY

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Naturally Beautiful Walls

MATERIAL SAFETY DATA SHEETS

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