Safety Data Sheet

Section 1 - Product and Company Identification

Product Name

Alberta Slip

Restrictions on Use

None applicable

Supplier Identification

Plainsman Clays
702 Wood Street
Medicine Hat, Alberta
T1A 7E5 Canada
Phone: 403-527-8535
Website: http://plainsmanclays.com

Emergency Phone Number

403-527-8535 (Monday-Friday 9pm-4.30am)

Product Use

Ceramic Glaze Ingredient

Section 2A - Hazards Identification

Hazard Classification

Carcinogenicity (inhalation) - Category 1A
Specific Target Organ Toxicity Exposure - Category 3 (Respiratory System)
Specific Target Organ Repeat Toxicity Exposure - Category 1 (Respiratory System)

GHS Label Elements / Hazard Pictograms

Signal Word: Warning

Hazard Statements

H350: May cause cancer
H332: Harmful if inhaled
H316: Causes mild skin irritation
H320: Causes eye irritation
H335: May cause respiratory irritation

Precautionary Statements

P261: Avoid breathing dust/fumes/gas/mist/vapours/spray. [As modified by IV ATP]
P280: Wear protective gloves/protective clothing/eye protection/face protection. [As modified by IV ATP]

OSHA/HCS Status

Clay mixture in dry form is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Section 3 - Composition

Component	CAS#	Approx % by Weight
Quartz (in raw clays)	14808-60-7	<15%
Kaolinite	1318-74-7	<15%
Feldspar	13244-96-5	<25%
Ball Clay	1332-58-7	<20%
Talc - Steatite (non-asbestos)	14807-96-6	<10%

Section 3A - Ingredients - Information

Substances / Mixtures

Mixture - A trade secret claim is made for this item.

Section 4 - First-Aid Measures

General

Never give anything by mouth to an unconscious person. If you feel unwell seek medical attention.

Inhalation

Move victim to well ventilated area. If coughing and irritation persists, seek medical attention.

Skin contact

Wash affected area with water. Obtain medical attention if irritation persists.

Eye contact

Remove contact lenses (if present and easy to do). Rince cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists.

Ingestion

Unlikely to be toxic unless large amounts have been ingested. Rinse mouth. Do NOT induce vomiting. If discomfort persists, seek medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Repeated or prolonged exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, dry cough, fever, loss of appetite and weight loss, chest pain. Acute silicosis can be fatal.

First-Aid - Symptoms and Effects, Both Acute and Delayed

Eye Contact

Prolonged contact with large amounts of dust may cause mechanical irritation.

Skin Contact

Prolonged contact with large amounts of dust may cause mechanical irritation.

Inhalation

Inhalation of high concentrations of dry clay dust may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects (see section 11).

Ingestion

Large quantities ingrested may cause gastrointestinal irritation.

Chronic Symptoms

Repeated or prolonged exposure to respiriable crystalline silica dust may cause lung damage in for form of silicosis. Symptoms include shortness of breath, fever, fatigue, loss of appetite, chest pain, dry non-productive cough.

Section 5 - Fire-Fighting Measures

Suitable extinguishing media

This product is not combustible. Use dry chemical or water.

Unsuitable extinguishing media

No restrictions on extinguishing media.

Hazardous thermal decomposition products

Decomposition products include steam (as the product dries), water vapor (as it dehydrates), carbon dioxide, tiny amounts of sulphur (as temperatures exceed 1500F).

Protective equipment and precautions for fire-fighters

Clay can become slippery when wet.

Section 6 - Accidental Release Measures

Personal precautions and protective equipment

Avoid inhalation of dust during clean-up. Wear approved respirators when dust levels exceed exposure limits. Wet clay is slippery, exercise caution when walking on it.

Emergency procedures

There are no emergency procedures required for this material.

Methods and materials for containment and cleaning up

For normal cleanup, use wet methods (hose, mop) to avoid dust geneation. Use dry methods to collect powdered or granular clay materials only if significant amounts must be collected. Do not use compressed air. Avoid generating dust.

Large cleanups: If needed, evacuate the area downwind during cleanup operations. Collect spilled slurry material using shovels, brooms, squeegees and appropriate containers. Be very cautions of slipping hazards. Water wash to remove any residue.

Environmental precautions

Clay is a natural material and will not cause adverse effects to most systems. However it can plug pipes and sumps so do not dump muddy water into your drains. Allow it to settle in containers, then pour off the water and dry out the sediment for disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Use proper lifting techniques to avoid physical injury. Wear approved respirators when working in areas where clay products having dust on the packaging are being moved.

Conditions for safe storage

Keep pugged clay out of direct sunlight. Do not freeze. Stack pugged material only as high as it will be stable. Keep hallways and passage way floors clean and dust free.

Section 8 - Exposure Controls/Personal Protection

Hazardous Ingredient	CAS#	Occupational Exposure Limits
Quartz, (Crystalline Silica) SiO2	14808-60-7	ACGIH TLV: TWA 0.025 mg/ m3 (respirable) OSHA PEL: TWA 10 mg/m3/ divided by the value %SiO2 + 2 (respirable) OSHA PEL: TWA 30 mg/m3/ divided by the value %SiO2 + 2 (total dust) CAL OSHA PEL: TWA .1 mg/ m3 (respirable) CAL OSHA PEL: TWA .3 mg/ m3 (total)
Kaolinite (Al2O3.2SiO2.2H2O)	1332-58-7	ACGIH TLV: TWA 2 mg/ m3 (respirable) / particulate matter containing no asbestos and <1% crystalline silica (respirable) OSHA PEL: TWA 5 mg/m3 (respirable) OSHA PEL: TWA 15 mg/m3 (total) CAL OSHA PEL: TWA 2 mg/ m3 (respirable)
Barium Carbonate - BaCO3	513-77-9	ACGIH TLV: TWA 3 mg/ m3 (respirable) (as Ba) OSHA PEL: TWA 0.5 mg/ m3 (total dust) (as Ba)
Mica - (Na,K)2O.2Al2O3.6SiO2.2H2O	12001-26-2	ACGIH TLV: TWA 3 mg/ m3 (respirable) OSHA PEL: TWA 3 mg/m3 (respirable) OSHA PEL: TWA 20 mppcf See Appendix C (Mineral Dusts) See Section 16) CAL OSHA PEL: TWA 3 mg/ m3 (respirable)

Engineering Measures

Clay mixture in moist form poses no inhalation health risk. Once clay mixture has dried, there may be dust generated by cleaning and working processes. In the event that dust is generated, use local exhaust ventilation or other engineering controls as required to maintain exposures below applicable occupational exposure limits (TLV).

Personal Protective Equipment (PPE)

Exhaust system: When sanding or finishing dry ware, use local exhaust to reduce the level of respirable dust that can be breathed or that will settle on floors and objects.
Respiratory Protection: Respirable dust should be monitored and levels in excess of appropriate exposure limits should be reduced by better ventilation, changing production methods, keeping floors cleaner, periodically cleaning shelves and other objects on which dust settles. When controls are not feasible wear NIOSH/OSHA approved respirators where airborne concentration exceeds PEL, otherwise wear an N95 particulate respirator.
Eye Protection: Use safety glasses where appropriate. Avoid working in areas having crystalline silica dust if you wear contact lenses.
Skin Protection: Protective cloting is not essential. Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

Section 9 - Physical and Chemical Properties

Physical State

Powder

Color

Dark grey

Odor

Earthy

Odor Threshhold

Not applicable

pH

6-8

Melting Point

> 1200C

Freezing Point

< 0C (32F)

Flash Point

Not applicable

Evaporation Rate

Not data available

Flamability

Not flammable

Explosion Limits

Not applicable

Vapor Pressure

Not applicable

Vapor Density

Not applicable

Relative Density

~2.5 g/cc

Solibilities

Not soluble in water

Partition Coefficient

Not applicable

Decomposition Temperature

Not applicable

Viscosity

Not applicable

Section 10 - Stability and Reactivity

Reactivity

Normally stable.

Chemical Stability

No stabilizers required. Safety issue: Mold may form in the plastic bag (moist clay mixture) after several months of shelf life (especially if the material is exposed to sunlight).

Possibility of Hazardous Reactions

None known

Conditions to Avoid

None known

Incompatible Materials

None known

Hazardous Decomposition Products

Temperatures above 2000F are required for decomposition products other than small amounts of CO2. Possible products are sulfur, metal fumes).

Section 11 - Toxicological Information

Inhalation - Immediate Effects

May cause mechanical irritation and discomfort.

Inhalation - Long Term Effects

Long term repeated and prolonged inhalation of respirable dust may cause damage in the form of silicosis, or, increase susceptibility to bronchitis, COPD, tuberculosis.
Silica has been classified by OSHA as a human lung carcinogen.

Effects of Silicosis

Symptoms included progressively more difficult breathing, cough, fever, weight loss. Acute silicosis can be fatal.

Other Routes of Exposure

Exposure to high levels of dust can irritate the eyes. Preexisting skin sensitivities or allergies can be aggravented by skin contact of dry or wet clay. No known short or long term mutagenic, teratogenic or development effects.

Section 12 - Ecological Information

Ecotoxicity

Clays and mineral powders used in this product are inert and insoluble.

Persistence and Degradability

n/a

Bioaccumulative Potential

n/a

Mobility in Soil

Mechanical only.

Other Adverse Effects

Clay particles have an electrolytic affinity for water. As their proportion increases in the soil it becomes more and more impermeable to water penetration.

Section 13 - Disposal Considerations

Personal Protection

Refer to section 8.

Appropriate Disposal Containers

Standard waste containers - no special requirements.

Appropriate Disposal Methods

In accorance with local, state and federal requirements. No special measures. Call your supplier for advice on repurposing specific material to another manufacturing process to eliminate the need for disposal.

Physical and Chemical Properities That May Affect Disposal

When dry clay dust is being transported and workers are exposed to it in confined environments, it should be in sealed containers that do not permit release of dust during handling.

Sewage Disposal

Do not dispose into sinks or toilets. When clay:mineral powder mixes disperse in plenty of water heavier particles quickly settle out and their sticky nature can make it difficult to flush them away.

Special Precautions for Landfills and Incineration Activities

None. This product is non-combustible.

Section 14 - Transportation Information

DOT Classification

Not regulated. No UN proper shipping name, transport hazard class, packing group number, bulk transport guidance, special precautions.

TDG Classification

Not regulated

ADR/ID Class

Not regulated

IMDG Class

Not regulated

IATA/DGR Class

Not regulated

Section 15 - Regulatory Information

TSCA - Toxic Substances Control Act - EPA

Quartz and other materials are listed in the TSCA Chemical Substance Inventory.

SARA/Title III (Emergency Planning & Community Right-to-Tnow Act

The mixture contains no substances at or above the reporting threshhold under section 313, based on available data.

Canada DSL

Listed.

Canadian WHMIS Listing

D2A Materials causing other toxic effects.

Specific State Regulations

Components found in this product may contain trace amounts of inherent naturally occuring elements (such as, but not limited to manganese, sulfur).

Section 16 - Release Information

Prepared By

Tony Hansen

Date

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Revision

6

Section 16 - Other Information

Definitions

WHMIS means Workers Hazardous Materials Information System (Canada)
SDS means Safety Data Sheet
HPR means Hazardous Products Regulations
ASTM means American System of Testing and Materials
OSHA means Occupational Safety & Health Administration
OSHA PEL means OSHA Permissible Exposure Limit
OSHA STEL means spot exposure for a duration of 15 minutes, that cannot be repeated more than 4 times per day, with at least 60 minutes between exposure periods
CAL-OSHA means California OSHA, most CAL-OSHA standards defer to the federal OSHA standards
IARC means International Agency for Research on Cancer
NTP means National Toxicology Program
HCS means Hazardous Communication Standard

CAS means Chemical Abstract Service
ACGIH means American Conference of Governmental Industrial Hygienists
TWA means Time Weighted Average (average exposure on the basis of an 8h/day, 40h/week work schedule)
TLV means Threshold Limit Value - American Conference of Governmental Industrial Hygienists (ACGIH)

Three types of TLVs for chemical substances as defined by the ACGIH are:
1. TLV-TWA - Time weighted average - average exposure on the basis of an 8h/day, 40h/week work schedule.
2. TLV-STEL - Short-term exposure limit - spot exposure for a duration of 15 minutes, that cannot be repeated more than 4 times per day, with at least 60 minutes between exposure periods.
3. TLV-C - Ceiling limit - absolute exposure limit that should not be exceeded at any time.