



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Bulk, Bagged and Sacked Clay. Includes Lincoln 60, Lincoln 8, Lincoln 9, Mortar and Fireclays, Newman Red, Loam (Wheatland), and Shale (Willow).
Product code : Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Ingredient in Ceramics Manufacturing. Building and Construction.

1.3. Details of the supplier of the safety data sheet

Gladding McBean
601 7th Street
Lincoln, CA 95648
T 916-645-3341

1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irritation 2
Eye Irritation 2A
Carcinogenicity 1A
Specific Target Organ Toxicity - Repeated Exposure 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) : [GHS07] [GHS08]
GHS07 GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : Causes skin irritation. Causes serious eye irritation. May cause cancer. Causes damage to lungs through prolonged or repeated exposure.
Precautionary statements (GHS-US) : Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS US)

4 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

Clay

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Quartz	(CAS No) 14808-60-7	30 - 60	Carc. 1A STOT RE 1
Aluminum oxide	(CAS No) 1344-28-1	10 - 30	Not classified
Iron oxide	(CAS No) 1309-37-1	1 - 25	Not classified
Titanium dioxide	(CAS No) 13463-67-7	≤ 3	Carc. 2
Potassium oxide	(CAS No) 12136-45-7	≤ 2	Skin Corr. 1B
Magnesium oxide	(CAS No) 1309-48-4	≤ 1	Not classified
Manganese dioxide	(CAS No) 1313-13-9	≤ 1	Ox. Sol. 3 Acute Tox. 4 (Oral) Acute Tox. 4 (Inhalation)

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Dust may cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation.

Clay

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid generating and breathing dust. Good housekeeping is important to prevent accumulation of dust. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Use with adequate ventilation.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable fraction)
OSHA	OSHA PEL TWA	0.05 mg/m ³ (Respirable fraction - PEL) 0.025mg/m ³ (Respirable fraction - Action level)
Aluminum oxide (1344-28-1)		
ACGIH	Not applicable	
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Iron oxide (1309-37-1)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	10 mg/m ³ (fume) 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Titanium dioxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust)
Potassium oxide (12136-45-7)		
ACGIH	Not applicable	
OSHA	Not applicable	
Magnesium oxide (1309-48-4)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (fume, total particulate)
Manganese dioxide (1313-13-9)		
ACGIH	ACGIH TWA (mg/m ³)	0.2 mg /m ³ (Mn)
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ (Mn)

8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

Hand protection : Wear chemically resistant protective gloves.

Eye protection : Wear eye protection.

Skin and body protection : Wear suitable protective clothing.

Clay

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular / Powder
Color	: Cream
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapor pressure	: No data available
Relative density	: 2.6
Relative vapor density at 20 °C	: No data available
Solubility	: Insoluble.
Partition coefficient: n-octanol/water	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

Clay

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

Clay	
LD50 oral rat	> 2000 ml/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5 mg/l/4h

Aluminum oxide (1344-28-1)	
LD50 oral rat	> 5000 mg/kg

Iron oxide (1309-37-1)	
LD50 oral rat	> 10000 mg/kg

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg

Magnesium oxide (1309-48-4)	
LD50 oral rat	> 5000 mg/kg

Manganese dioxide (1313-13-9)	
LD50 oral rat	> 3478 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Based on available data, the classification criteria are not met.
Germ cell mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : May cause cancer.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

Iron oxide (1309-37-1)	
IARC group	3 - Not classifiable

Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure) : Causes damage to lungs through prolonged or repeated exposure. Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.
Aspiration hazard : Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation : Dust may cause respiratory tract irritation.
Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Clay	
Persistence and degradability	Not established.

Clay

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

12.3. Bioaccumulative potential

Clay	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT.

Not regulated for transport.

Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Aluminum oxide (1344-28-1)

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting : 1.0 % (fibrous forms)

15.2. US State regulations

Clay	
State or local regulations	This product contains chemicals known to the State of California to cause cancer and reproductive harm.

SECTION 16: Other information

Date of issue : 04/09/2015

Other information : 08/30/2019 Version 2: OSHA Silica PEL Revised.
: 11/22/2019 Version 3: Title Changed.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.