Safety Data Sheet (SDS)

Laguna Clay Co.

GHS - United States

Section 1 - Identification

Product Name	**WC391 B-3 BROWN CLAY**
Common Names	Pottery Clay, Dry Clay, Moist Clay
Company / Manufacturer	Laguna Clay Co. 14400 Lomitas Ave. City of Industry, CA 91746 (626) 330-0631 fax (626) 333-7694 info@lagunaclay.com
Emergency Number	911
Product Use	Non-exhaustive list: pottery, artware, ceramic building materials
Restrictions on Use	None applicable

Section 2 - Hazardous Identification

Contains Crystalline Silica ≥1% Respirable

GHS label elements / Hazard pictograms

Signal Word:

Danger

OSHA/HCS status	Clay mixture in dry form is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Classification of the substance or mixture	Carcinogenicity (inhalation) - Category 1A and Specific organ toxicity (Repeated Exposure) (Respiratory tract through inhalation) - Category 1
Hazard Statement	(H350) Cancer Hazard. Contains quartz (crystalline silica) which may cause cancer. Risk of cancer depends upon duration and level of exposure to the dust. Not an acute hazard. (H332) Prolonged inhalation of dust may cause lung injury. Inhalation of high concentrations of dust may cause mechanical irritation and discomfort of the respiratory tract. Repeated exposure may have chronic effects. (H316 + H320 + H335) Can cause skin, respiratory, and eye irritation.
Precautionary Statements	(P261) Avoid breathing dust. (P280) Wear protective gloves, eye, and respiratory protection.

Section 3 - Composition / Information on Ingredients

Substances/Mixtures *Mixture - A trade secret claim is made for this item.*

Component	CAS #	Approx % by Wt.
Kaolin	1332-58-7	25-65%
Crystaline Silica - quartz	14808-60-7	10-25%
Manganese Dioxide	7439-96-5	<5%
Titanium Dioxide	13463-67-7	<2%
Barium Carbonate	513-77-9	<2%
Aluminum Oxide	1344-28-1	<2%
Brown Iron Oxide	1309-37-1	<2%
Barium Oxide	1304-28-5	<2%

Section 4 - First Aid Measures

First-Aid Measures

Eye Contact If eye contact occurs, rinse immediately with plenty of water. If irritation persists, seek medical attention.

Skin Contact If irritation occurs, wash thoroughly with water. If it persists, seek medical attention.

Inhalation Move victim to fresh air in well ventilated area. If coughing or irritation persists, seek medical attention.

Ingestion Consult physician and/or obtain competent medical assistance.

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 ingested may cause gastrointestinal irritation.

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

Section 5 - Fire Fighting Measures

General Fire Hazards	Clay mixture in dry or moist form is not flammable and does not support fire. The paper bags or plastic bags and cardboard boxes containing the mixture are flammable.
Extinguishing Media	Use appropriate extinguishing media for surrounding fire.
Chemical hazards from fire	Clay mixture does not contain hazardous decomposition products.
Protective actions and equipment for fire-fighters	Clay mixture and packaging can become slippery when wet. Fire-fighters should wear appropriate protective equipment.

Section 6 - Accidental Release Measures

Clean-up Methods	If appropriate, use gentle water spray to wet down and minimize dust generation.
Personal Precautions and Personal Protective Equipment	Wear appropriate protective equipment and clothing during clean-up. When dry sweeping use NIOSH approved respirators when dust levels exceed exposure limits.
Environmental Precautions	Clay is a natural mineral product mixture and will not cause adverse effects to the water system other than turbidity from suspended particles.
Emergency procedures & Methods of Containment	There are no emergency procedures required for this mixture. Place dry clay dust in a sealed container for re-use or proper disposal.

Section 7 - Handling & Storage

Precautions for safe handling	Use proper lifting techniques to avoid physical injury.
Recommendations on the conditions for safe storage	No special storage considerations. Do not store moist clay mixture below freezing point (< 0 °C or<32°F).

Section 8 - Exposure Counts / Personal Protection

Airborne Exposure Limits

Hazardous Ingredient	Wt. % Aprox.	CAS#	OSHA PEL* / ACGIH TLV*
Kaolin	25-65%	1332-58-7	5mg/m3 / 2mg/m3 respirable
Crystaline Silica - quartz	10-25%	14808-60-7	0.1mg/m3 / 0.025mg/m3 respirable
Manganese Dioxide	<5%	7439-96-5	5mg/m3 / 0.02mg/m3 respirable
Titanium Dioxide	<2%	13463-67-7	15mg/m3 / 10mg/m3 total dust
Barium Carbonate	<2%	513-77-9	0.5mg/m3 / 0.5mg/m3 respirable
Aluminum Oxide	<2%	1344-28-1	5mg/m3 / 0.1mg/m3 respirable
Brown Iron Oxide	<2%	1309-37-1	10PPM(STEL) / 5mg/m3
Barium Oxide	<2%	1304-28-5	

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)

Respiratory Dust is generated when working with dry clay mixture. To minimize exposure to dust and/or crystalline silica, cutting or sanding dry clay products should be conducted with sufficient ventilation. Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by feasible engineering controls, including (but not limited to) wet sanding, wet suppression, ventilation, and process enclosure. When such controls are not feasible, NIOSH/MSHA approved respirators must be worn in accordance with a respiratory protection program which meets OSHA requirements as set forth at 29 CFR1910.134 and ANSI Z88.2-1080 "Practices for Respiratory Protection". In most cases, a disposable N-95 Particulate Respirator is sufficient.

Eyes Use of NIOSH/OSHA approved safety glasses with side shields is recommended. Face shields should also be used when dry sawing clay products. Wear tight fitting dust goggles when excessively (visible) dusty conditions are present or are anticipated. NIOSH recommends that contact lenses not be worn when working with crystalline silica dust.

Skin and Body Protective Clothing is not essential. Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

Section 9 - Physical & Chemical Properties

Appearance	Lump/dry powder or moist mud brick	**Evaporation Rate**	No data available
Color	White, red, brown	**Solubility in water at 100 C**	None
Physical state	Solid	**Decomposition temperature**	Not Applicable
pH	6 - 8	**Viscosity**	Not Applicable
Odor	Earthy odor	**Flashpoint**	Not Applicable
Odor threshold	Not Applicable	**Boiling Point**	Not Applicable
Melting Point	> 1200 °C (>2150°F)	**Flammability**	Not Applicable
Freezing Point	< 0 °C (<32°F)	**Vapor Pressure (mm HG)**	Not Applicable
Relative density/Specific Gravity	~2.6 gm/cc	**Vapor Density**	Not Applicable
		Partition coefficient	Not Applicable
		Auto-ignition temp	Not Applicable

Section 10 - Stability & Reactivity

Reactivity	No dangerous reactions are known under normal conditions of use
Chemical Stability	Stable at standard temperature and pressure. No stabilizers required to maintain chemical stability. Safety issues - Mold may form in plastic bag (moist clay mixture) after several months of shelf life.
Possibility of Hazardous Reactions and Conditions to Avoid	None known
Incompatibility / Hazardous decomposition products	None known

Section 11 - Toxicological Information

Primary Route of Exposure: Skin, Eye Contact, Inhalation and Ingestion

Specific Organ Toxicity - Single Exposure
Target organs include ears, skin, respiratory system, and gastrointestinal tract.

Specific Organ Toxicity - Repeated Exposure
Causes damage to eyes, skin, respiratory system, and gastrointestinal tract through prolonged or repeated exposure.

Acute Short-Term Exposure Effects
May cause eye irritation, skin irritation, respiratory tract irritation, and gastrointestinal tract irritation. Inhalation of high concentrations of dry clay dust may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects.

Chronic Long Term Exposure Effects
Silica has been classified by OSHA as a human lung carcinogen. Repeated or prolonged exposure of respirable crystalline silica dust may cause lung damage in the form of silicosis.

Effects of silicosis include bronchitis/chronic obstructive pulmonary disorder, increased susceptibility to tuberculosis, scleroderma (a desease affecting skin, blood vessels, joints and skeletal muscles), and possible renal disease. Acute silicosis can be fatal.

Related Symptoms
Symptons will include shortness of breath, fever, fatigue, loss of appetite, chest pain, dry non-productive cough.

Medical Conditions Aggravated by Exposure:
Individuals with pre-existing allergies, eye disorders, skin disorders, respiratory disorders and/or gastrointestinal disorders may have increased susceptibility to the effects of exposure.

OSHA, IARC, and NTP Carcinogen Classifications

Chemicals with Carcinogen Potential	CAS #	OSHA	IARC	NTP
Crystaline Silica - quartz	14808-60-7	YES	YES - 1	YES
Titanium Dioxide	13463-67-7	NO	YES - 2B	NO

IARC - International Agency for Research on Cancer
1 = Carcinogenic to humans
2A = Probably carcinogenic to humans
2B = Possibly carcinogenic to humans

OSHA - Occupational Safety & Health Administration
NTP - National Toxicology Program

Section 12 - Ecological Information (non-mandatory)

Ecotoxicity	None Known
Biochemical oxygen demand (BOD5)	None Known
Chemical oxygen demand (COD)	None Known
Products of Biodegradation	None Known
Toxicity of the products of Biodegradation	None Known
Bioaccumulation Potential	None Known
Potential to move from soil to groundwater	None Known
Other adverse effects	None Known

Section 13 - Disposal Configurations (non-mandatory)

Personal Protection	Refer to section 8 for proper PPE when disposing of waste material.
Appropriate disposal containers	Standard waste disposal containers - no special requirements.
Appropriate disposal methods	Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements.
Physical and chemical properties that may affect disposal	Dry clay dust should be placed in a sealed container or in a manner that reduces or eliminates the release of the product. Moist clay has no special requirements.
Sewage disposal	Do not dispose of into sinks or toilets. Never dispose of this product into a sewer system.
Special precautions for landfills or incineration activities	There are no special precautions for disposal in a landfill. This product is non-combustible and is not suitable for incineration.

Section 14 - Transporation Information (non-mandatory)

Regulatory Information	UN Number	UN Proper Shipping Name	Transport Hazard Class	Packing Group Number	Bulk Transport Guidance	Special Precautions
DOT Classification	Not regulated	—	—	—	—	—
TDG Classification	Not regulated	—	—	—	—	—
ADR/RID Class	Not regulated	—	—	—	—	—
IMDG Class	Not regulated	—	—	—	—	—
IATA-DGR Class	Not regulated	—	—	—	—	—

Section 15 - Regulatory Information (non-mandatory)

TSCA - Toxic Substances Control Act - EPA

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

California Prop. 65 WARNING

This product contains a chemical known to the State of California to cause cancer. (Prop. 65 - California Health and Safety Code Section 2549 Et Seq).

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

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

Section 16 - Other Information (non-mandatory)

Definitions

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CAL-OSHA	California Occupational Safety & Health Administration
IARC	International Agency for Research on Cancer
OSHA	Occupational Safety & Health Administration
MSHA	Mine Safety and Health Administration
NIOSH	National Institute of Occupational Safety and Health
NTP	National Toxicology Program
HCS	Hazardous communication standard
OSHA PEL	OSHA permissible exposure limit
STEL	Short-term exposure limit
TLV	Threshold limit value
TWA	Time weighted average

Three types of TLVs for chemical substances as defined by the **ACGIH** are:

TLV-TWA	Time weighted average - average exposure on the basis of an 8h/day, 40h/week work schedule.
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.
TLV-C	Ceiling limit - absolute exposure limit that should not be exceeded at any time.

This SDS is in compliance with The Globally Harmonized System of Classification and Labeling of Chemicals (GHS), and is subject to revsion at any time without notice. Its current revision date is : 6/18/2020

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