Safety Data Sheet (SDS)

Laguna Clay Co.

GHS - United States

Section 1 - Identification

Product Name	**GEMD1247 EM-1247 VOLCANIC OCHRE GLAZE**
Common Names	Ceramic glaze, dry or liquid glaze
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	Glaze mixture in dry powder form or if sprayed is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Classification of the substance or mixture	Carcinogenicity (inhalation) - Category 1A 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. (H372) 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/srpay (P262) Do not get into eyes, on skin, or on clothing (P264) Wash hands thoroughly after handling. (P270) Do not eat, drink, or smoke when using this product (P273) Avod relase to the environment. (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.
Calcium Carbonate	1317-65-3	25-65%
Nepheline Syenite	37244-96-5	10-25%
Lithium Carbonate	554-13-2	5-10%
Disodium Tetraborate Decahydrate	1303-96-4	<5%
Potassium Carbonate	584-08-7	<5%
Sodium Carbonate	497-19-8	<5%
Crystaline Silica - quartz	14808-60-7	<5%
Brown Iron Oxide	1332-37-2	<5%
Bentonite	1302-78-9	<5%
Titanium Dioxide	13463-67-7	<2%
Sodium Bicarbonate	144-55-8	<2%
Kaolin	1332-58-7	<2%
Barium Sulfate	7727-43-7	<2%

Section 4 - First Aid Measures

First-Aid Measures

General First Aid Never give anything by mouth to an unconscious person. If you feel unwell, seek medial attention.

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. Glaze is abrasive and may scratch eyes.

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

Inhalation Inhalation of high concentrations of dry glaze 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	Glaze mixture in dry or liquid form is not flammable and does not support fire.
Extinguishing Media	Use appropriate extinguishing media for surrounding fire.
Chemical hazards from fire	Glaze mixture does not contain hazardous decomposition products.
Protective actions and equipment for fire-fighters	Glaze 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	Do not allow spills or wastewater to flow into sewer or waterway.
Emergency procedures & Methods of Containment	There are no emergency procedures required for this mixture. Place dry glaze dust in a sealed container for re-use or proper disposal.. For liquid spills, use suitable absorbent material and place in container for proper disposal. (see section 13 for guidence on appropriate disposal methods.)

Section 7 - Handling & Storage

Precautions for safe handling	Keep bags out of direct sunlight. Do not expose dry glaze to moisture until use. Do not expose liquid glaze to freezing. Use proper lifting techniques to avoid physical injury.
Recommendations on the conditions for safe storage	No special storage considerations, but keep in a dry, cool location.

Section 8 - Exposure Counts / Personal Protection

Airborne Exposure Limits

Hazardous Ingredient	Wt. % Aprox.	CAS#	OSHA PEL* / ACGIH TLV*
Calcium Carbonate	25-65%	1317-65-3	5mg/m3 / respirable
Nepheline Syenite	10-25%	37244-96-5	5mg/m3 / None established respirable
Lithium Carbonate	5-10%	554-13-2	15mg/m3 / total dust
Disodium Tetraborate Decahydrate	<5%	1303-96-4	10mg/m3 / 2mg/m3 respirable
Potassium Carbonate	<5%	584-08-7	
Sodium Carbonate	<5%	497-19-8	
Crystaline Silica - quartz	<5%	14808-60-7	0.1mg/m3 / 0.025mg/m3 respirable
Brown Iron Oxide	<5%	1332-37-2	10PPM(STEL) / 5mg/m3
Bentonite	<5%	1302-78-9	5mg/m3 / 3mg/m3 respirable
Titanium Dioxide	<2%	13463-67-7	15mg/m3 / 10mg/m3 total dust
Sodium Bicarbonate	<2%	144-55-8	5mg/m3 / 10mg/mg respirable
Kaolin	<2%	1332-58-7	5mg/m3 / 2mg/m3 respirable
Barium Sulfate	<2%	7727-43-7	10PPM(STEL) / 10mg/m3 total dust

Engineering Measures

Glaze in liquid form poses no inhalation health risk. Once glaze 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 glaze or during spray application. To minimize exposure to dust and/or crystalline silica, cutting or sanding dry clay/glaze 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

Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

Work/Hygienic Practices

Avoid creating and breathing dust. Wear NIOSH/MSHA approved dust mask when working in dusty conditions. (N-95) Food, beverages, and smoking materials should NOT be in the work area. Persons using ceramic materials should wash thoroughly before eating, drinking, smoking, or applying cosmetics.

Protective Clothing Pictograms



N-95 face mask

Section 9 - Physical & Chemical Properties

Appearance	Colored, heavy liquid or powder	**Evaporation Rate**	No data available
		Solubility in water at 100 C	None
Physical state	dry powder of liquid glaze	**Decomposition temperature**	Not Applicable
		Viscosity	Not Applicable
pH	6 - 8	**Flashpoint**	Not Applicable
Odor	Earthy odor	**Boiling Point**	100 °C (212°F)
Odor threshold	Not Applicable	**Flammability**	Not Applicable
Melting Point	> 955 °C (>1750°F)	**Vapor Pressure (mm HG)**	Not Applicable
Freezing Point	< 0 °C (<32°F)	**Vapor Density**	Not Applicable
Relative density/Specific Gravity	~2.35 g/cc	**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.
Possibility of Hazardous Reactions and Conditions to Avoid	None known
Incompatibility / Hazardous decomposition products	None known

Section 11 - Toxicological Information

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

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.

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. The generation of waste should be avoided or minimized. Dispose of non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
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 : 6/2/2020

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