# Safety Data Sheet (SDS)

**Laguna Clay Co.**

*GHS - United States*

## Section 1 - Identification

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|---|---|
| **Product Name** | **GMSD4 MS-4 FOREST GREEN GLAZE** |
| **Common Names** | Ceramic glaze, dry or liquid glaze |
| **Company / Manufacturer** | Laguna Clay Co.<br>14400 Lomitas Ave.<br>City of Industry, CA 91746<br>(626) 330-0631 fax (626) 333-7694<br>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. |
|---|---|---|
| Feldspar | 68476-25-5 | 25-65% |
| Crystaline Silica - quartz | 14808-60-7 | 10-25% |
| Barium Carbonate | 513-77-9 | 5-10% |
| Kaolin | 1332-58-7 | 5-10% |
| Copper Oxide | 1317-38-0 | <5% |
| Talc - Steatite | 14807-96-6 | <5% |
| Bentonite | 1302-78-9 | <2% |
| Dolomite | 16389-88-1 | <2% |
| Strontium Carbonate | 1633-05-2 | <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

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| **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

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| **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

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| **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* |
|---|---|---|---|
| Feldspar | 25-65% | 68476-25-5 | 5mg/m3 / 2mg/m3 respirable |
| Crystaline Silica - quartz | 10-25% | 14808-60-7 | 0.1mg/m3 / 0.025mg/m3 respirable |
| Barium Carbonate | 5-10% | 513-77-9 | 0.5mg/m3 / 0.5mg/m3 respirable |
| Kaolin | 5-10% | 1332-58-7 | 5mg/m3 / 2mg/m3 respirable |
| Copper Oxide | <5% | 1317-38-0 | / 1mg/m3 mist/dust |
| Talc - Steatite | <5% | 14807-96-6 | 2mg/m3 / 2mg/m3 respirable |
| Bentonite | <2% | 1302-78-9 | 5mg/m3 / 3mg/m3 respirable |
| Dolomite | <2% | 16389-88-1 | 5mg/m3 / respirable |
| Strontium Carbonate | <2% | 1633-05-2 | none established |
| 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

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| **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 |
| Talc - Steatite | 14807-96-6 | NO | YES - 1 | 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)

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| **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)

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| **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.<br>The generation of waste should be avoided or minimized. Dispose of non-recyclable products via a licensed waste disposal contractor.<br>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

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|---|---|
| **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 : 6/3/2020

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