



New Mexico Clay

Clay in liquid form poses no health risk.
Inhalation of dry clay dust should be avoided.

Safety Data Sheet

SDS prepared by Brant Palley of New Mexico Clay Inc

GHS – United States

Section 1. Product and Company Identification

Product Names Cone 04 Casting Slip – Dry & Liquid

Synonym Ceramic Casting Slip

Supplier/Manufacturer New Mexico Clay
3300 Girard Blvd NE
Albuquerque NM 87107
505-881-2350 phone
505-881-6067 fax
sales@nmclay.com

Emergency Phone Number 911

Product Use Pottery Manufacturing

Restrictions on use Not applicable

Section 2. Hazards Identification

OSHA/HCS status This mixture is considered hazardous in the dry form by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification of the substance or mixture **OSHA - CARCINOGENICITY** (Inhalation) - Category 1A
(See section 11 for OSHA, IARC, and NTP carcinogen listings)
OSHA - SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) (respiratory tract) (inhalation) - Category 1

Signal Word **Danger**

Hazard Statement Cancer Hazard. Contains quartz (crystalline silica) which can cause cancer. Risk of cancer depends upon duration and level of exposure to clay dust. Not an acute hazard. Prolonged inhalation of clay dust may cause lung injury. Inhalation of high concentrations of clay dust may cause mechanical irritation and discomfort of the (respiratory tract). Repeated exposure may cause chronic effects.
Wear a N-95 face mask when cleaning up dry clay dust.

* **Clay in liquid form poses no health risk. Inhalation of dry clay dust should be avoided.**

GHS label elements / Hazard pictograms



Precautionary Statements
Avoid generating dust.
Do not breath dust.

Unclassified Hazards
Slippery when wet.

% of ingredients with unknown acute toxicity
None Known

Health Hazard	*	1
Fire Hazard		0
Reactivity		0
Personal Protection		E

* Chronic Potential

Hazardous Materials Identification System

HAZARD INDEX

4 Severe Hazard	0 Minimal Hazard
3 Serious Hazard	* An asterisk (*) or other designation corresponds to additional information on a data sheet or separate chronic effects notification.
2 Moderate Hazard	
1 Slight Hazard	

PERSONAL PROTECTION INDEX

A	
B	+
C	+ +
D	+ +
E	+ +
F	+ + +



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Section 3. Composition / Information on Ingredients

Substances:

Chemical	CAS Numbers	Ingredient % of Product Mixture (Clay)		Chemical % of Ingredient	
Quartz,(Crystalline Silica) SiO2	CAS # 14808-60-7	Ball Clays Talc	38.3 57.6	Ball Clays Talc	5 – 30 0 – 2
Kaolinite Al2O3.2SiO2.2H2O	CAS # 1332-58-7	Ball Clays	38.3	Ball Clays	65 – 95
Magnesium Silicate (Talc / non-asbestos) Mg3Si4O10(OH)2	CAS# 14807-96-6	Talc	57.6	Talc	94 – 99
Calcite (Crystalline) CaCO3	CAS# 13397-26-7	Talc	57.6	Talc	0 – 2
Chlorite CIO2	CAS# 1318-59-8	Talc	57.6	Talc	0 – 2

Section 4. First-Aid Measures

Description of first-aid Measures:	
First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical attention.
First-aid measures after inhalation	Move victim to well ventilated area. If mechanical discomfort persists, seek medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Wash affected area with soap and warm water. Obtain medical attention if irritation persists.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking, or redness persists.
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Unlikely to be toxic by ingestion. If discomfort persists, seek medical attention.
Most Important Symptoms and Effects, Both Acute and Delayed:	
Symptoms/injuries	Causes damage to organs through prolonged or repeated exposure (inhalation).
Symptoms/injuries after inhalation	May cause cancer by inhalation. Dust from this product may cause irritation to the respiratory tract.
Symptoms/injuries after skin contact	Prolonged contact with large amounts of dust may cause mechanical irritation.
Symptoms/injuries after eye contact	Prolonged contact with large amounts of dust may cause mechanical irritation.
Symptoms/injuries after ingestion	If a large quantity has been ingested: intestinal blockage. Gastrointestinal irritation.
Chronic symptoms	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, cough, fever, and weight loss. Acute silicosis can be fatal.

If exposed or concerned, get medical advice and attention.



Section 5. Fire-Fighting Measures



National Fire Protection Association (U.S.A.)

Suitable extinguishing media	This product is not combustible. Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	No restrictions on extinguishing media for this mixture.
Special hazards arising from the substance or mixture	This mixture is not flammable and does not support fire. The plastic bags and cardboard boxes containing the mixture are flammable.
Hazardous thermal decomposition products	This mixture does not contain hazardous decomposition products.
Special protective actions for fire-fighters	Product can become slippery when wet.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment.

Section 6. Accidental Release Measures

Use of personal precautions

Avoid inhalation of dry clay dust.

Wear a N-95 face mask when cleaning up dry clay dust.

Emergency procedures

There are no emergency procedures required for this mixture.

Methods and Materials for containment

Dry slip comes in paper bags and weigh 50 lbs.

Liquid slip comes in gallon containers. There are no special spill measures that apply for dry or liquid slip.

Clean up procedures

For dry dusts, use a vacuum to clean up spillage.

If appropriate, use gentle water spray to wet down and minimize dust generation. Place dry clay dust in a sealed container.

Wear a N-95 face mask when cleaning up dry clay dust.

Section 7. Handling & Storage

Precautions for safe handling

Keep out of direct sunlight. Do not expose dry slip to moisture until use. Do not expose liquid slip to freezing.

Bags of dry slip weigh 52 lbs.

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 Controls / Personal Protection

Chemical Name	CAS Numbers	Occupational Exposure Limits
Quartz, (Crystalline Silica) SiO ₂	CAS#14808-60-7	ACGIH TLV: TWA 0.025 mg/ m ³ (respirable) OSHA PEL: TWA 10 mg/m ³ / divided by the value "%SiO ₂ " + 2 (respirable) OSHA PEL: TWA 30 mg/m ³ / divided by the value "%SiO ₂ " + 2 (total dust) CAL OSHA PEL: TWA .1 mg/ m ³ (respirable) CAL OSHA PEL: TWA .3 mg/ m ³ (total)
Kaolinite Al ₂ O ₃ .2SiO ₂ .2H ₂ O	CAS#1332-58-7	ACGIH TLV: TWA 2 mg/ m ³ (respirable) / particulate matter containing no asbestos and <1% crystalline silica (respirable) OSHA PEL: TWA 5 mg/m ³ (respirable) OSHA PEL: TWA 15 mg/m ³ (total) CAL OSHA PEL: TWA 2 mg/ m ³ (respirable)
Magnesium Silicate (Talc - non-asbestos) Mg ₃ Si ₄ O ₁₀ (OH) ₂	CAS# 14807-96-6	ACGIH TLV: TWA 2 mg/ m ³ (respirable) OSHA PEL: TWA 20 mppcf CAL OSHA PEL: TWA 2 mg/ m ³ (respirable)
Calcite (Crystalline) CaCO ₃	CAS# 13397-26-7	ACGIH TLV: Not Established. OSHA PEL: TWA 5 mg/m ³ (respirable) OSHA PEL: TWA 15 mg/m ³ (total)
Chlorite ClO ₂	CAS# 1318-59-8	ACGHI TLV: Not Established. OSHA PEL: Not Known OSHA PEL: Not Known
Calcium Carbonate CaCO ₃	CAS# 1317-65-3	ACGIH TLV: TWA 10 mg/m ³ for particulate matter containing no asbestos and < 1% crystalline silica OSHA PEL: TWA 5 mg/m ³ (respirable) OSHA PEL: TWA 15 mg/m ³ (total) CAL OSHA PEL: TWA 5 mg/ m ³ (respirable) CAL OSHA PEL: TWA 10 mg/ m ³ (total)

Appropriate engineering controls

Clay in liquid form poses no health risk and no

inhalation risk. When mixing **dry** slip, dust will be generated by mixing, 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).

Recommendations for personal protective measures

Local Exhaust: When mixing, dry sanding or grinding clay products, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section III - ACGIH "Industrial Ventilation, A Manual of Recommended Practice," latest edition.

Respiratory Protection: Dust is generated when working with dry clay. To minimize exposure to dust and/or crystalline silica, the mixing of 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.



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Section 8. Exposure Controls / Personal Protection

Eye Protection: Use NIOSH/OSHA approved safety glasses with side shields. Face shields can also be used when mixing dry slip. 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 Protection: 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 dust 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

Physical State	Powder for dry slip / liquid for liquid slip
Appearance	Grey Powder in dry form / thick liquid in liquid form
Odor	Earthy.
Odor Threshold	Not Applicable
pH	6 - 8
Solubility in Water	None
Melting Point	> 1200 °C (>2150°F)
Freezing Point	< 0 °C (<32°F)
Specific Gravity / Relative Density	2.35 g/cc
Evaporation Rate	No data available
Flash Point	Not Applicable
Auto-Ignition Temperature	Not Applicable
Decomposition Temperature	Not Applicable
Flammability	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Explosive Limits	Not Applicable
Viscosity	Not Applicable
Partition Coefficient: n-octanol/water	Not Applicable
Initial Boiling Point & Boiling Range	Not Applicable

Section 10. Stability & Reactivity

Reactivity	Hazardous reactions will not occur under normal conditions.
Chemical stability	Stable at standard temperature and pressure. No stabilizers required to maintain chemical stability. Safety issues – Mold may form in bag after several months of shelf life.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	None known
Incompatible materials	None known
Hazardous decomposition products	None known



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Section 11. Toxicological Information

Routes of Exposure Inhalation of dry clay dust, Ingestion

Descriptions of the delayed, immediate, or chronic effects from short- and long-term exposure	
Inhalation	Inhalation of high concentrations of dry clay dust may cause mechanical irritation and discomfort. Repeated exposure may cause chronic effects.
Eye Contact	Not a primary eye irritant. May cause mechanical irritation.
Skin Contact/Irritation	Not a skin irritant. Not absorbed through skin.
Sensitization	Not a sensitizer.
Ingestion	Not an ingestion hazard.
Chronic Effects	
OSHA Carcinogen	Lung cancer – Silica has been classified by OSHA as a human lung carcinogen. 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, cough, fever, and weight loss. Acute silicosis can be fatal. Short term exposure is of little concern.
Mutagenic Effects	None Known
Teratogenic Effects	None Known
Developmental Toxicity	None Known
Effects of Silicosis	
Bronchitis/Chronic Obstructive Pulmonary Disorder. Tuberculosis – Silicosis makes an individual more susceptible to TB. Scleroderma – a disease affecting skin, blood vessels, joints and skeletal muscles. Possible renal disease.	Symptoms of Silicosis Shortness of breath; possible fever. Fatigue; loss of appetite. Chest pain; dry, nonproductive cough. Respiratory failure, which may eventually lead to death.
Numerical Measures of toxicity	None Known
Remarks	
Carcinogenicity	Repeated or long term exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal. Short term exposure is of little concern.

OSHA, IARC, and NTP Carcinogen Classifications

Chemicals with Carcinogen Potential	CAS#	OSHA	IARC	NTP
Quartz, (Crystalline Silica) SiO2	CAS # 14808-60-7	Yes	Yes - Group 1	Yes
Magnesium Silicate (Talc / non-asbestos) Mg3Si4O10(OH)2	CAS# 14807-96-6	No	No - Group 3	No

Substances, mixtures and exposure circumstances in this list have been classified by the IARC as **Group 1: The agent (mixture) is carcinogenic to humans.** The exposure circumstance entails exposures that are carcinogenic to humans. This category is used when there is *sufficient evidence* of carcinogenicity in humans. Exceptionally, an agent (mixture) may be placed in this category when evidence of carcinogenicity in humans is less than sufficient but there is *sufficient evidence* of carcinogenicity in experimental animals and strong evidence in exposed humans that the agent (mixture) acts through a relevant mechanism of carcinogenicity.

Substances, mixtures and exposure circumstances in this list have been classified by the IARC as **Group 3: The agent (mixture or exposure circumstance) is not classifiable as to its carcinogenicity to humans.** This category is used most commonly for agents, mixtures and exposure circumstances for which the evidence of carcinogenicity is inadequate in humans and inadequate or limited in experimental animals. Exceptionally, agents (mixtures) for which the evidence of carcinogenicity is inadequate in humans but sufficient in experimental animals may be placed in this category when there is strong evidence that the mechanism of carcinogenicity in experimental animals does not operate in humans. Agents, mixtures and exposure circumstances that do not fall into any other group are also placed in this category. Further details can be found in the [IARC Monographs](#).

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 Considerations (non-mandatory)

Personal Protection	Refer to Section 8: "Recommendations for Personal Protective Measures" when disposing of ceramic waste.
Appropriate disposal containers	Standard waste disposal containers – no specials requirements.
Appropriate disposal methods	Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. In most cases, this is normal waste disposal. 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. Packaging should be recycled before disposal.
Sewage disposal	Do not dispose of into sinks or toilets. They will clog. 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. Transportation 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
CONFORMS WITH ASTM D4236	Certified Non-Toxic in moist form. ASTM - American Society for Testing and Materials
California Prop. 65	WARNING: This product contains a chemical known to the State of California to cause cancer. (Prop. 65 - Calif. Health & 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

Definitions

- ASTM** means American System of Testing and Materials
- OSHA** means Occupational Safety & Health Administration
- 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
- CAL-OSHA** means California OSHA, most CAL-OSHA standards defer to the federal OSHA standards
- 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
- 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.

This SDS is in compliance with The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) – prepared May 12, 2015. This data sheet is subject to change without notice.

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any patent or in violation of any law or regulation. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.