

UC9 UNIVERSAL CERAMICO

MATERIAL SAFETY DATA SHEET

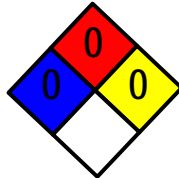
INDUSTRIAL GYPSUM

SECTION 1 HAZARD IDENTIFICATION

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings:

Health: 0
Fire: 0
Reactivity: 0



HIMS Ratings:

Health: *0
Fire: 0
Reactivity: 1

HEALTH	*	0
FLAMMABILITY		0
PHYSICAL HAZARD		1
PERSONAL PROTECTION		E

0 = Minimal Hazard
1 = Slight Hazard
2 = Moderate Hazard
3 = Serious Hazard
4 = Severe Hazard

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.

*Respirable crystalline silica can cause lung disease and/or cancer. E – Safety glasses, gloves and dust respirator

EMERGENCY OVERVIEW

This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract. When mixed with water, this material hardens and becomes very hot – sometimes quickly. **DO NOT** attempt to make a cast enclosing any part of the body using this material.

SECTION 1 HAZARD IDENTIFICATION continued

POTENTIAL HEALTH EFFECTS

ACUTE:

Eyes: Direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

Skin: When mixed with water, this material hardens and becomes very hot – sometimes quickly. **DO NOT** attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb. Direct, prolonged or repeated contact with the skin may cause irritation. Rinse with water until skin is free of material to avoid irritation, then wash skin thoroughly with mild soap and water. Repeated exposure may dry skin.

Inhalation: Dust exposures generated during the handling of the product may irritate eyes, skin, nose, throat, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.

Ingestion: Unlikely to occur, but if ingested may cause gastric disturbances if swallowed. Plaster of paris is non-toxic, however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region. See First Aid Measures - Ingestion .

CHRONIC:

Inhalation: Testing of dust from our plaster of paris has not detected respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing. The weight percent of respirable crystalline silica has not been measured in this product.

Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.

Skin: Repeated contact may dry the skin, causing cracking or dermatitis. Sensitive individuals may develop an allergic dermatitis.

Eyes: No known effects.

Ingestion: No known effects.

TARGET ORGANS: Eyes, skin and respiratory system.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

**SECTION 2
FIRST AID MEASURES**

FIRST AID PROCEDURES:

Eyes: Flush thoroughly with water for 15 minutes. If irritation persists, consult physician.

Skin: Wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation persists, consult physician.

Inhalation: Remove to fresh air. Leave the area of dust exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however if conditions warrant, contact physician.

Ingestion: This product is not intended to be ingested or eaten. If gastric disturbance occurs, call physician. This product contains gypsum plaster. Plaster of paris hardens and, if ingested, may result in obstruction of the gut, especially the pyloric region. Drinking gelatin solutions or large volumes of water may delay setting.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

Notes to Physician: Treatment should be directed at the control of symptoms and the clinical condition.

**SECTION 3
FIRE FIGHTING MEASURES**

General Fire Hazards:	Not expected to burn.		
Extinguishing Media:	Water or use extinguishing media appropriate for surrounding fire.		
Special Fire Fighting Procedures:	Wear appropriate personal protective equipment .		
Unusual Fire and Explosion Hazards:	None		
Hazardous Combustion Products:	Above 1450° C - decomposes to calcium oxide (CaO) and sulfur dioxide (SO ₂).		
Flash Point:	None Known	Auto Ignition:	Not Applicable
Method Used:	Not Applicable	Flammability Classification:	Not Applicable, may act as a fire retardant
Upper Flammable Limit (UFL):	Not Applicable	Rate of Burning:	Not Applicable
Lower Flammable Limit (LFL):	Not Applicable		

**SECTION 4
ACCIDENTAL RELEASE MEASURES**

CONTAINMENT:

No special precautions. Wear appropriate personal protection .

CLEAN-UP:

Use normal clean up procedures. If dry, shovel or sweep up material from spillage and place collected material into a container for recovery or waste disposal. Avoid dust generation. Avoid inhalation of dust and contact with eyes and skin. Wear appropriate protective equipment. Maintain proper ventilation. If vacuum is used to collect dust, use an industrial vacuum cleaner with a high efficiency air filter. If sweeping is necessary, use dust suppressant. Do not use compressed air for clean up. These procedures will help minimize potential exposures. If washed down, may plug drains. If already mixed with water, scrape up and place in container.

DISPOSAL:

Follow all local, state, provincial and federal regulations. Never discharge large releases directly into sewers or surface waters. Slurry may plug drains. Trace amounts of residue can be flushed to a drain, using plenty of water.

**SECTION 5
HANDLING AND STORAGE**

HANDLING:

Avoid dust contact with eyes. Wear the appropriate eye protection against dust .

Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded .

Minimize dust generation and accumulation. Use good safety and industrial hygiene practices.

STORAGE:

Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities . Dew point conditions or other conditions causing presence of liquid will harden this material during storage.

Protect product bags or containers from physical damage and weather.

Keep bags or other containers tightly closed to prevent moisture contact.

SECTION 6
EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide ventilation sufficient to control airborne dust levels especially respirable crystalline silica.

If user operations generate airborne dust, use ventilation to keep dust concentrations below permissible exposure limits .

Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below permissible exposure limits .If engineering controls are not possible, wear a properly fitted NIOSH/MSHA-approved particulate respirator.

RESPIRATORY PROTECTION:

Wear a NIOSH/MSHA-approved respirator equipped with particulate cartridges when dusty in poorly ventilated areas, and if TLV is exceeded. A respiratory program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

OTHER PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face: Wear eye protection (safety glasses or goggles) to avoid possible eye irritation.

Skin: Wear gloves and protective clothing to prevent repeated or prolonged skin contact. Barrier creams or skin lotion may be applied to face, neck, wrist and hands when skin is exposed to help prevent drying of skin.

General: Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

SECTION 7
PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to off white	Viscosity	Not Applicable
Physical State	Solid (powder)	Solubility (H₂O)	0.67-0.88 g/100 g solution
Odor	Low to no odor	Boiling Point	Not Applicable
pH @ 25 ° C	~7	Melting Point	Not Applicable
Particle Size	Varies	Softening Point	Not Applicable
Molecular Weight	~145 g/mole	Freezing Point	Not Applicable
Bulk Density	~ 55-70 lb/ft ³	Vapor Density (Air = 1)	Not Applicable
Specific Gravity (H₂O = 1)	2.5	Vapor Pressure (mm Hg)	Not Applicable
Percent Volatile	Zero	Evaporation Rate (BuAc = 1)	Not Applicable
VOC Content	Zero		

SECTION 8
CHEMICAL STABILITY AND REACTIVITY

STABILITY: Stable in dry environments. Dew point conditions or other conditions causing presence of liquid will harden this material.

CONDITIONS TO AVOID: Contact with acids, water, high humidity, and incompatibles.

INCOMPATIBILITY: Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION: Above 1450° C - calcium oxide (CaO) and sulfur dioxide SO₂

**SECTION 9
TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS:

The sulfate ion has caused gastro-intestinal disturbance in humans following large oral doses.

Limited studies involving the repeated inhalation of an (unspecified) calcium sulfate failed to identify any particular target organs in monkeys, rats and hamsters.

No evidence of mutagenicity was found in Ames bacterial tests.

Plaster of paris: Oral LD50 rat > 5000 mg/kg
 Dermal LD50 – None Determined
 Skin Irritation LD50 – None Determined
 Eye Irritation LD50– None Determined

LD₅₀: Not Available for product.

LC₅₀: Not Available for product.

CHRONIC EFFECTS / CARCINOGENICITY:

Crystalline silica: Testing of dust from our plaster of paris has not detected respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing. The weight percent of respirable crystalline silica has not been measured in this product.

Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.

In June, 1997, IARC classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans .

**SECTION 10
ECOLOGICAL INFORMATION**

ENVIRONMENTAL TOXICITY: This product has no known adverse effect on ecology.

Ecotoxicity value: Not determined.

**SECTION 11
DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD:

Dispose of material in accordance with federal, state, and local regulations. Never discharge directly into sewers or surface waters. Consult with environmental regulatory agencies for guidance on acceptable disposal practices. Slurry may plug drains.