



# MATERIAL SAFETY DATA SHEET

## SECTION I: PRODUCT IDENTIFICATION

Product: Plaster of Paris  
 Trade Name and Synonyms: Gypsum Plaster, Calcium Sulfate Hemi-hydrate  
 Use: General casting work  
 Formula:  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$

## SECTION II: HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

MATERIAL .....	%	TLV (mg/m <sup>3</sup> )	PEL (mg/m <sup>3</sup> )	CAS NUMBER
Plaster of Paris .....	> 95	10	15(T)/5(R)	26499-65-0
Limestone .....	< 1.5	10	15(T)/5(R)	1317-65-3
Crystalline Silica .....	< 5	0.1 (R)	0.1 (R)	14808-60-7

(T) = Total (R) = Respirable

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

### INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health : 0 Fire : 0 Reactivity : 0 Other : N/A  
 HMIS Ratings: Health : 0 Fire : 0 Reactivity : 0 Other : N/A

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

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

## SECTION III: PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Off white to gray powder; low odor.  
 Melting Point: 1450° C - decomposes  
 Solubility in Water: 0.15%  
 Specific Gravity (H<sub>2</sub>O = 1): 2.3 - 2.6  
 pH: 8.0 - 9.0  
 Hardening Time: Varies. Check usage and/or product specification data for each product.  
 Storage: Keep away from moisture.

## SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: Use extinguishing media appropriate for surrounding fire  
 Special Fire Fighting Procedure: None  
 Unusual Fire and Explosion Hazards: None  
 Flash Point (Method Used): Non-combustible

## SECTION V: HEALTH HAZARD DATA

### EFFECTS OF OVEREXPOSURE:

#### 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 then slowly becomes hot. 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. Rubbing of this product against the skin can result in abrasions. Rinse with water until free of material to avoid abrasions, and then wash skin thoroughly with mild soap and water.

**INHALATION:** Inhalation of dusts from this product may irritate the nose, throat, lungs, 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 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 Emergency and First Aid - Ingestion below.

**CHRONIC:** This material displays no specific toxic properties.

**INHALATION:** Prolonged and repeated exposure to respirable crystalline silica result in lung disease (i.e., silicosis) and/or lung cancer.

**EYES:** None known.

**SKIN:** None known.

**INGESTION:** No known effects.

### EMERGENCY AND FIRST AID PROCEDURES:

**EYES:** Irrigate with eyewash solution or clean water, holding the eyelids apart for at least 10 minutes. Obtain medical attention. If irritation persists, consult physician.

**SKIN:** Remove contaminated clothing. Wash skin with mild soap and water. A hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing.

**INHALATION:** No harmful effects expected. No specific recommendations. If gastric disturbance occurs, call physician. This product contains gypsum plaster. Plaster of Paris hardens when wetted and, if ingested, may result in obstruction of the gut, especially the pyloric region.

**FURTHER MEDICAL TREATMENT:** Unlikely to be required but if necessary, treats symptomatically.

**TARGET ORGANS:** Eyes, skin, and respiratory system

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

**PRIMARY ROUTES OF ENTRY:** Inhalation: eyes and/or skin contact.

## SECTION VI: REACTIVITY DATA

**STABILITY:**

Stable

**INCOMPATIBILITY:**

Acids

**HAZARDOUS POLYMERIZATION:**

Will not occur

**HAZARDOUS DECOMPOSITION:**

Above 1450° C could produce CaO and SO<sub>2</sub>.

## SECTION VII: SPILL OR LEAK PROCEDURES

### STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Sweep up material from spillage into waste container for disposal, avoid creating excessive dust. If washed down, may plug drains. Ensure complete removal as wet calcium sulfate may present a slipping hazard and subsequently can set to a concrete like substance. Spillage or uncontrolled discharges into watercourses must be altered to the National Rivers Authority or other appropriate regulatory body. If already mixed with water, scrape up and place in container. Avoid dusting conditions, minimize airborne dust. Wear appropriate protective equipment.

### WASTE DISPOSAL METHOD:

Dispose of material in accordance with Federal, State and local regulations. Slurry may plug drains.

## SECTION VIII: SPECIAL PROTECTION INFORMATION

No TLV assigned to this mixture, see Ingredients Section. Minimize exposures in accordance with good hygiene practice.

### RESPIRATORY PROTECTION:

Not typically necessary under normal conditions of use. Provide general ventilation and local exhaust ventilation to meet TLV requirements of individual ingredients and to control dusting conditions. Avoid creating dust. Wear a NIOSH/MSHA-approved dust respirator in poorly ventilated areas and/or if TLV is exceeded.

### VENTILATION:

Ventilated to keep exposures below TLV. General ventilation is expected to be satisfactory. Use local exhaust ventilation if necessary to control dust.

### PERSONAL PROTECTIVE EQUIPMENT:

Gloves or protective clothing are usually not necessary but may be desirable in specific working situations. Wear gloves and protective clothing to prevent repeated or prolonged skin contact. Wear eye protection (safety glasses or goggles) to avoid articulate irritation of the eye.

## SECTION IX: SPECIAL PRECAUTIONS

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

During handling wear the appropriate respiratory, eye and skin protection if warranted per environmental conditions. Keep dry. Dew point conditions or other conditions causing presence of liquid will harden this material during storage.

### WARNING!

When mixed with water, this material hardens and then slowly becomes hot. 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. Dust may cause eye, nose, throat, or respiratory irritation. Avoid dust inhalation and exposure to dust. If dusty, wear a NIOSH/MSHA-approved dust respirator. Use proper ventilation to reduce dust exposure. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Do not ingest. If ingested and any discomfort occurs, call physician.

KEEP OUT OF REACH OF CHILDREN