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 A Subsidiary of USG Corporation

Product Safety: 1 (800) 507-8899
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 Version 4

SECTION 1
CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Fast Cast™ Exterior Gypsum Cement; Fast Cast™ Fast Set Exterior Gypsum Cement; Fast Cast™ 20 Exterior Gypsum Cement

CHEMICAL FAMILY: Mixture of Portland Cement and Plaster of Paris

SECTION 2
COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Plaster of Paris	< 60	10	15(T)/5 (R)	26499-65-0
Portland Cement	> 40	10	15(T)/5(R)	65997-15-1
Crystalline Silica	<2	0.1(R)	0.1(R)	14808-60-7

(T) – Total (R) – Respirable

Respirable crystalline silica: IARC: Group 1 carcinogen, NTP: Known human carcinogen

SECTION 3
HAZARDS IDENTIFICATION

Portland cement and plaster of Paris are nuisance dusts. Portland cement is strongly alkaline and can cause severe injury. Contact with eyes or skin can cause irritation and possible corrosion damage, burning and corneal damage. Particulates will also cause mechanical irritation. Inhalation of dust can cause severe upper respiratory irritation.

POTENTIAL HEALTH EFFECTS

ACUTE:

Eyes: Airborne dust or direct contact can irritate or burn eyes. The extent of damage depends on duration of contact. Rapid response is very important. (See Section 4, First Aid Measures). Portland cement can cause burns and cornea damage that may result in permanent damage.

Skin: Contact can cause severe irritation, redness, rash, and/or burns. Dry cement will not cause an alkaline burn by itself. Burns may occur 12 or 48 hours after exposure. Burns may occur without obvious pain at the time of exposure. Plaster of Paris when mixed with water will harden and then slowly becomes hot. **DO NOT** attempt to make a cast enclosing any part of the body. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb.

Inhalation: Inhalation of dust can irritate or burn the nose, throat, and mucous membrane of the upper respiratory tract.

Ingestion: Can cause chemical burns to the mouth, throat, esophagus and stomach. Can cause a burning sensation in mouth and stomach. Pain and nausea can occur if a sufficient amount is ingested.

CHRONIC:

Skin: Repeated contact may dry the skin, causing cracking or dermatitis.

Inhalation: Bronchitis and emphysema may occur from prolonged dust inhalation. IARC states that crystalline silica inhaled in the form of quartz or cristobolite from occupational sources is carcinogenic to humans (Group 1). Prolonged and repeated exposure to respirable crystalline silica can cause respiratory diseases such as silicosis and lung cancer.



SECTION 4
FIRST AID MEASURES

FIRST AID PROCEDURES:

- **Eyes:** Immediately flush thoroughly with lots of water including flushing under upper and lower eyelids for at least 15 minutes. Get medical attention. An eye examination should be performed.
- **Skin:** Flush exposed skin with copious amounts of water for at least 15 minutes depending on concentration, amount and duration of exposure. Immediately remove all contaminated clothing, including footwear. Launder clothing before reuse. If irritation or pain persists get medical attention immediately. A commercially available hand lotion may be used to treat dry skin areas. If skin is 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. Get medical attention immediately.
- **Ingestion:** Do not induce vomiting. Dilute immediately with milk or water to drink, no more than 8 ounces in adults and 4 ounces in children. Neutralization is contraindicated. Seek medical attention.

NOTE TO PHYSICIANS

Skin irritation may occur hours or days after the time of exposure. The main types of skin reactions seen are dermatitis of the hands, forearms, and feet seborrheic eczema, stasis dermatitis, and, occasionally exfoliative dermatitis.

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, dermatitis.

SECTION 5
FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

- **Flash Point (Method Used):** Non-combustible
- **Upper and lower flammable limits in air:** Non-combustible
- **Autoignition temperature:** Non-combustible
- **Flammability classification** Non-Combustible
- **Burning rate:** Non-combustible
- **Hazardous combustion products:** Above 1450° C - decomposes to calcium oxide (CaO) and sulfur dioxide (SO₂).
- **Properties that initiate/contribute to fire:** Non-combustible.

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Avoid breathing dust. Avoid skin and eye contact with dust. Wear appropriate protective equipment (See Section 8).



SECTION 6
ACCIDENTAL RELEASE MEASURES

CONTAINMENT:

Wear appropriate personal protection (See Section 8). Contain the spill by keeping it dry and away from incompatibles (See Section 10).

CLEAN-UP:

Sweep up material into a covered waste container for recovery or disposal. Avoid dust generation. Avoid inhalation of dust and contact with skin and eyes. If wet, scrape up and place in container for disposal.

DISPOSAL:

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

SECTION 7
HANDLING AND STORAGE

HANDLING:

- Avoid contact with skin, eyes or clothing. Wear the appropriate eye and skin protection against dust (See Section 8).
- Do not breathe dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8).
- Minimize dust generation and accumulation.
- Wash hands before eating.

STORAGE:

- Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities (see Section 10).
- Protect product bags or containers from physical damage.
- Keep containers tightly closed to prevent moisture intrusion.
- Do not enter storage area unless it is adequately ventilated.

SECTION 8
EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS:

- Good general ventilation should be sufficient to control airborne levels.
- If user operations generate airborne dust, use ventilation to keep exposure concentrations below exposure limit (See Section 2).
- Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below recommended exposure levels (see Section 2).
- Facilities storing or using this material should be equipped with an adequate number of eyewash facilities and safety showers.

RESPIRATORY PROTECTION: Wear a NIOSH/MSHA-approved respirator equipped with particulate cartridges when dust exists 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 CLOTHING:

- Wear eye protection to avoid particulate irritation of the eye.
- Contact lenses should not be worn when working with Portland cement.
- Wear clean, dry rubber gloves, long-sleeved shirts and trousers to prevent skin contact.
- Barrier creams may be applied to face, neck, wrist and hands when skin is exposed.



SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Gray powder dust, low odor
Boiling Point:	NA
Melting Point:	1450° C - decomposes
Specific Gravity (H₂O = 1):	2.7 - 3.0
Solubility in water	0.2/100g
pH @ 25 ° C	12
Vapor Density (Air = 1):	Not known
Vapor Pressure (mm Hg)	Not known
Evaporation Rate (BuAc = 1)	Not known

SECTION 10
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:	High humidity, moisture, contact with 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 SO ₂

SECTION 11
TOXICOLOGICAL INFORMATION

ACUTE DATA:

Inhalation: Immediately Dangerous to Life and Health (IDLH): No evidence could be found.

Oral LD₅₀ : Not determined

Dermal LD₅₀ rat: Not Determined

Skin Irritation: Not Determined

Eye Irritation: Not Determined

CHRONIC EFFECTS/CARCINOGENICITY:

Inhalation: Chronic overexposure to airborne respirable crystalline silica may result in lung disease (i.e., silicosis) and/or lung cancer.

SECTION 12
ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE: Not determined.

ENVIRONMENTAL TOXICITY: Portland cement is expected to be toxic to fish due to its high alkalinity. Discharge of large quantities directly into waterways would be expected to cause significant fish kills.



SECTION 13
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.

SECTION 14
TRANSPORT INFORMATION

INTERNATIONAL (Air)

Proper Shipping Name: None

Hazard Class: None

UN/NA: None

Packing Group: None

Information reported for product/size: None

U.S. DOT INFORMATION: Label: None

SECTION 15
REGULATORY INFORMATION

CANADIAN REGULATIONS

All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

UNITED STATES REGULATIONS

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory.

Portland cement (65997-15-1) and plaster of Paris (26499-65-0) are not listed under SARA 302.

Portland cement (65997-15-1) and plaster of Paris (26499-65-0) are not listed under SARA 302 (RQ or TPQ), SARA 313 (chemical category), CERCLA, RCRA 261.33; TSCA 8 (d) or TSCA 12(b).

Portland cement (65997-15-1) and plaster of Paris (26499-65-0) are not listed under SARA 311/312.

INGREDIENTS WITH CARCINOGENICITY CLASSIFICATION

	IARC	NTP
*Respirable Crystalline Silica	Group 1	Known

* The average concentration of respirable crystalline silica measured in USG plaster of paris was less than 0.1 Wt.%.

*The average concentration of respirable crystalline silica has not been measured in this product.

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



SECTION 16
OTHER INFORMATION

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 2* Fire: 0 Reactivity: 1 Other: N/A
 HMIS Ratings: Health: 2* Fire: 0 Reactivity: 1
 Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.
 0 = Minimal Hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = Serious Hazard 4 = Severe Hazard
 * Severe irritant to eyes and skin

ΔWARNING!

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 may cause severe burns that may require surgical removal of affected tissue or amputation of limb. Dust may cause skin, 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. Portland cement is strongly alkaline and can be corrosive to eyes, skin, and respiratory tract. Wear eye and skin protection. If eye contact occurs, immediately flush thoroughly with water for 15 minutes and get medical attention. Do not ingest. If ingested and any discomfort occurs, call physician.

Product safety information: (800) 507-8899 or www.usg.com

KEEP OUT OF REACH OF CHILDREN.

Key/Legend

TLV	Threshold Limit Value
PEL	Permissible Exposure Limit
CAS	Chemical Abstracts Service (Registry Number)
NIOSH	National Institute for Occupational Safety and Health
MSHA	Mine Safety and Health Administration
OSHA	Occupational Health and Safety Administration
AGIH	American Conference of Governmental Industrial Hygienists
IARC	International Agency for Research on Cancer
DOT	United States Department of Transportation
ICAO	International Civil Aviation Organization
IATA	International Air Transport Association
EPA	United States Environmental Protection Agency
NFPA	National Fire Protection Association
HMIS	Hazardous Materials Identification System
PPE	Personal Protection Equipment
TSCA	Toxic Substances Control Act
DSL	Canadian Domestic Substances List
NDSL	Canadian Non-Domestic Substances List
SARA	Superfund Amendments and Reauthorization Act of 1986
RCRA	Resource and Recovery Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
UN/NA#	United Nations/North America number

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