PLASTER OF PARIS | CAMEO Chemicals

cameochemicals.noaa.gov/chemical/25054

Chemical Datasheet

PLASTER OF PARIS

Chemical Identifiers

What is this information?

CAS Number	UN/NA Number	DOT Hazard Label	USCG CHRIS Code
26499-65-0	none	data unavailable	none

NIOSH Pocket Guide	International Chem Safety Card
Plaster of Paris	PLASTER OF PARIS

NFPA 704

data unavailable

General Description

White or yellowish, finely divided, odorless powder consisting mostly or entirely of calcium sulfate hemihydrate, CaSO4*1/2H2O. Forms a paste when it is mixed with water that soon hardens into a solid. Used in making casts, molds, and sculpture. Generally non-toxic.

Hazards

What is this information?

Reactivity Alerts

none

Air & Water Reactions

No rapid reaction with air. No rapid reaction with water.

Fire Hazard

No information available.

Health Hazard

Excerpt from NIOSH Pocket Guide for Plaster of Paris :

Exposure Routes: Inhalation, ingestion, skin and/or eye contact

Symptoms: Irritation eyes, skin, mucous membrane, respiratory system; cough

Target Organs: Eyes, skin, respiratory system (NIOSH, 2022)
Reactivity Profile

PLASTER OF PARIS is non-flammable and non-combustible. Has generally low chemical reactivity but can act as an oxidizing agent under extreme conditions. Decomposes at high temperature to generate toxic oxides of sulfur. Reacts exothermically but slowly with moisture in the air or water to form gypsum CaSO4.2H2O.

Belongs to the Following Reactive Group(s)

Non-Redox-Active Inorganic Compounds

Potentially Incompatible Absorbents

No information available.

Response Recommendations

What is this information?
Isolation and Evacuation

No information available.

Firefighting

No information available.

Non-Fire Response

No information available.

Protective Clothing

Excerpt from NIOSH Pocket Guide for Plaster of Paris :

Skin: No recommendation is made specifying the need for personal protective equipment for the body.

Eyes: No recommendation is made specifying the need for eye protection.

Wash skin: No recommendation is made specifying the need for washing the substance from the skin (either immediately or at the end of the work shift).

Remove: No recommendation is made specifying the need for removing clothing that becomes wet or contaminated.

Change: No recommendation is made specifying the need for the worker to change clothing after the workshift. (NIOSH, 2022)
DuPont Tychem® Suit Fabrics

No information available.

First Aid

Excerpt from NIOSH Pocket Guide for Plaster of Paris :

Eye: IRRIGATE IMMEDIATELY - If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.

Breathing: RESPIRATORY SUPPORT - If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

Swallow: MEDICAL ATTENTION IMMEDIATELY - If this chemical has been swallowed, get medical attention immediately. (NIOSH, 2022)

Physical Properties

What is this information?

Chemical Formula:	$CaSO_4 = 0.5H_2O$

Flash Point: data unavailable

Lower Explosive Limit (LEL): data unavailable

Upper Explosive Limit (UEL): data unavailable

Autoignition Temperature: data unavailable

Melting Point: 325°F (Loses H2O) (NIOSH, 2022)

Vapor Pressure: 0 mmHg (approx) (NIOSH, 2022)

Vapor Density (Relative to Air): data unavailable

Specific Gravity: 2.5 (NIOSH, 2022)

Boiling Point: data unavailable

Molecular Weight: 145.2 (NIOSH, 2022)

Water Solubility: 0.3 % at 77°F (NIOSH, 2022)

Ionization Energy/Potential: data unavailable

IDLH: data unavailable

AEGLs (Acute Exposure Guideline Levels)

No AEGL information available.

ERPGs (Emergency Response Planning Guidelines)

No ERPG information available.

PACs (Protective Action Criteria)

No PAC information available.

Regulatory Information

What is this information? ▸

EPA Consolidated List of Lists

No regulatory information available.

CISA Chemical Facility Anti-Terrorism Standards (CFATS)

No regulatory information available.

OSHA Process Safety Management (PSM) Standard List

No regulatory information available.

Alternate Chemical Names

What is this information?

- CALCIUM SULFATE HEMIHYDRATE
- CRYSTACAL
- DENSITE
- DENSITE (GYPSUM)
- DRIED CALCIUM SULFATE
- DRIED GYPSUM
- FGR
- GYPSUM HEMIHYDRATE
- HEMIHYDRATE GYPSUM
- PH 200
- PH 200 (FILLER)
- PLASTER OF PARIS
- SAKURA PLASTER OF PARIS B GRADE
- TA 20
- TIGER STONE