

Gypsum

1. General information

The information contained herein was obtained from sources believed to be reliable; Electrochemical Devices, Inc. (EDI) disclaims all liability for the content. This information applies to material in bulk form and may not be relevant to the small quantities of material used in our products. Gypsum is present in EDI reference electrodes with **AGG**, **CUG** or **ZIN** in the second grouping of the model designation; the material is entirely contained within the electrode housing. It is also present underground reference electrodes, which are designated by the initial letter **U** in the model designation, and is contained in a cotton bag on these products.

Synonyms: Calcium sulfate dihydrate; Alabaster; Plaster

CAS#: 10101-41-4

2. Hazard Overview

Appearance: white solid.

Caution! May cause eye, skin, and respiratory tract irritation.

Target Organs: None known.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation.

Inhalation: May cause respiratory tract irritation.

Chronic: Not available.

3. First Aid

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

4. Fire Fighting

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

5. Accidental Release

General Information: Use proper personal protective equipment as indicated in Section 7.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Reduce airborne dust and prevent scattering by moistening with water. Clean up spills immediately, observing precautions in the Protective Equipment section.

6. Handling and Storage

Handling: Wash thoroughly after handling. Wash hands before eating. Use only in a well-ventilated area. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Keep container closed when not in use.

7. Exposure Control

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

ACGIH: none listed

NIOSH: none listed

OSHA - Final PELs: 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)

OSHA Vacated PELs: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

8. Physical and Chemical Characteristics

Physical State: Solid

Appearance: white

Odor: None reported.

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Slightly soluble in water.

Specific Gravity/Density: 2.32

Molecular Formula: CaSO₄·2H₂O

Molecular Weight: 172.1

9. Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Dust generation.

Incompatibilities with Other Materials: No significant incompatibilities identified with common materials and contaminants.

Hazardous Decomposition Products: Oxides of sulfur, calcium oxide.

Hazardous Polymerization: Has not been reported.

10. Toxicological Information

LD50/LC50: Not available.

Carcinogenicity: CAS# 10101-41-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Mutagenicity: No data available.

Neurotoxicity: No data available.

11. Ecological Information

No information available.