



## CADMIUM SULFATE

### 1. Product Identification

Synonyms: Cadmium sulfate (1:1) hydrate (3:8); cadmium sulfate octahydrate..

CAS No.: 10124-36-4 (Anhydrous) 7790-84-3 (Octahydrate)

Molecular Weight: 769.52

Chemical Formula:  $3\text{CdSO}_4 \cdot 8\text{H}_2\text{O}$

Product Codes: 30557 , 30558

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Cadmium Sulfate	7790-84-3	99 - 100%

### 3. Hazards Identification

**Inhalation:** Inhalation of dust may produce irritation, headache, metallic taste and/or cough. Severe exposures may produce shortness of breath, chest pain, and flu-like symptoms with weakness, fever, headache, chills, sweating, nausea and muscular pain.

**Ingestion:** Toxic. Ingested cadmium salts may cause severe and sometimes fatal poisonings. Symptoms can include severe nausea, vomiting, diarrhea, abdominal pains, choking, dizziness, and salivation. Kidney and liver dysfunction may occur.

**Skin Contact:** Causes irritation to skin. Symptoms include redness, itching, and pain.

**Eye Contact:** Causes irritation, redness, and pain.

**Chronic Exposure:** Chronic exposure to cadmium, even at relatively low concentrations, may result in kidney damage, anemia, pulmonary fibrosis, emphysema, perforation of the nasal septum, loss of smell, male reproductive effects, and an increased risk of cancer of the lung and of the prostate. Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders, eye problems, blood disorders, prostate problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.

### 4. First Aid Measures

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:** Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Contact:** Wipe off excess material from skin then immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

### 5. Fire Fighting Measures

**Fire:** This material is a noncombustible solid, but the dust can be a moderate fire hazard when exposed to heat or flame, or when reacted with oxidizing agents, hydrogen azide, zinc, selenium, or tellurium.

**Explosion:** Not considered to be an explosion hazard.

**Fire Extinguishing Media:** Water spray, dry chemical, alcohol foam, or carbon dioxide.

The information contained herein is in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.



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Website : www.technopharmchem.com

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. If involved in a fire, this material can emit very toxic fumes of cadmium.

#### 6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Do not flush to the sewer.

#### 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Wear special protective equipment (Sec. 8) for maintenance break-in or where exposures may exceed established exposure levels. Wash hands, face, forearms and neck when exiting restricted areas. Shower, dispose of outer clothing, change to clean garments at the end of the day. Avoid cross-contamination of street clothes.

#### 8. Exposure Controls/Personal Protection

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Respirators : If the exposure limit is exceeded and engineering controls are not feasible, a half-face high efficiency particulate respirator (NIOSH type filter) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

#### 9. Physical and Chemical Properties

Appearance: Colorless crystals.

Odor: Odorless.

Solubility: Freely soluble.

Density: 3.08

pH: No information found.

% Volatiles by volume @ 21C (70F): 0

Boiling Point: Not applicable.

Melting Point: Loses water above 40C forming monohydrate by 80C

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.

#### 10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Oxides of sulfur and the contained metal.

Hazardous Polymerization: Will not occur.

Incompatibilities: Oxidizing agents, metals, hydrogen azide, zinc, selenium and tellurium.

Conditions to Avoid: Heat, flame, ignition sources, dusting and incompatibles.



#### 11. Toxicological Information

##### Toxicological Data:

Hydrate: Investigated as a tumorigen, mutagen, reproductive effector. Anhydrous: Oral rat LD50: 280 mg/kg. Investigated as a tumorigen, mutagen, reproductive effector.

#### 12. Ecological Information

This material is expected to significantly bioaccumulate.

Environmental Toxicity: This material is expected to be toxic to aquatic life.

#### 13. Disposal Considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

#### 14. Transport Information

##### Land

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Proper Shipping Name: CADMIUM COMPOUNDS

Hazard Class: 6.1

UN/NA: UN2570

Packing Group: III

Information reported for product/size: 500G

##### International (Water, I.M.O.)

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Proper Shipping Name: CADMIUM COMPOUNDS

Hazard Class: 6.1

UN/NA: UN2570

Packing Group: III

Information reported for product/size: 500G

##### International (Air, I.C.A.O.)

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Proper Shipping Name: CADMIUM COMPOUNDS

Hazard Class: 6.1

UN/NA: UN2570

Packing Group: III

Information reported for product/size: 500G

#### 15. Regulatory Information

SARA 311/312: Acute: Yes    Chronic: Yes    Fire: No    Pressure: No

#### 16. Other Information

Product Use:

Laboratory Reagent.