

Material Safety Data Sheet



Cadmium Chloride Solution

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Carolina Biological Supply Company

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

CAROLINA

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Section 1 - Product Description

Product Name: Cadmium Chloride Solution

Product Code(s): C19148

Size: 60 ml

Chemical Name: Cadmium Chloride Solution

CAS Number: 7790-78-5

Formula: $\text{CdCl}_2 \cdot 5/2\text{H}_2\text{O}$

Synonyms: Cadmium Dichloride Solution

Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Hazard Identification

Emergency Overview: DANGER - Harmful by inhalation and if swallowed. May cause cancer. May cause heritable genetic damage. Possible risk of impaired fertility. May cause harm to the unborn child. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation to skin.

Ingestion: Harmful if swallowed.

Inhalation: Harmful by inhalation.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Cadmium Chloride (CAS# 7790-78-5) 0.1 - 10%

TLV units: ACGIH-TLV 0.01mg(Cd)/m³ (Inhalable); 0.002 mg(Cd)/m³ (Resp.) (TWA)

PEL units: OSHA-PEL 0.005 mg(Cd)/m³ (TWA)

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): N/A

NFPA Rating:

Health: 2

Fire: 0

Reactivity: 0

Extinguisher Media: Use media suitable to extinguish surrounding fire.

Flammable Limits in Air % by Volume: N/A

Autoignition Temperature: N/A

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

Do not empty into drains; dispose of this material and its container in a safe way.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Do not ingest or take internally.

Avoid contact with skin and eyes. Keep container tightly closed in a cool, well-ventilated place.

Store in a secure area suitable for toxic material.

Keep locked up and out of the reach of children.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: N/A

Boiling Point: approx. 100 °C (212°F)

Vapor Density(Air=1): N/A

Percent Volatile by Volume: 0%

Solubility in Water: Soluble

Melting Point: approx. 0°C (32°F)

Vapor Pressure: N/A

Specific Gravity (H₂O=1): approx. 1

Evaporation Rate (BuAc=1): N/A

Appearance and Odor: Clear colorless liquid with faint odor.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Splashing, dust, and aerosol production

Incompatibility (Materials to Avoid): Halogens, Alkalies, Acids, Amines, Peroxides,

Hazardous Decomposition Products: Metal Fumes, Halogenated compounds (Cl, F, Br),

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: IP LD50 - Rat: 1800 ug/kg

ORL LD50 - Mouse: 60 mg/kg

ORL LD50 - Rat: 88 mg/kg

Effects of Overexposure:

Acute: See Section 2

Chronic: Mutation data cited. Reproductive data cited. Listed by NTP, IARC as causing cancer. Teratogen data cited.

Conditions Aggravated by Overexposure: Respiratory disorders, Liver disorders, Impaired Kidney Function,

Target Organs: Respiratory system, Blood, Kidneys, Reproductive systems, Musculoskeletal system

Primary Route(s) of Entry: Inhalation, Ingestion, and Skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: N/A

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: Not Regulated for Transport

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

WARNING: This product contains a chemical known to the state of California to cause cancer.

Hazard Category for SARA Section 311/312 Reporting: Acute

Name List:

Cadmium Chloride - No

Chemical Category:

Cadmium Chloride - Cadmium Compound

CERCLA Section 103 RQ(lb.): Cadmium Chloride - 100 lbs (45.4 kg)

RCRA Section 261.33: Cadmium Chloride - No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available

NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act