

SAFETY DATA SHEET

Date Printed: 05/13/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: >98% Cadmium Chloride Monohydrate

Product Code: CD-CL-018-C.1HYD

CAS Number: 35658-65-2

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : T+; R26

T; R25-R48/23/25

N; R50-53

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Repeated exposure - Category 1 - Danger (CLP : STOT RE 1) H372

Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

Acute toxicity, Inhalation - Category 2 - Danger (CLP : Acute Tox. 2) H330

Environmental hazards : Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP

: Aquatic Acute 1) H400

Hazardous to the aquatic environment - Chronic hazard - Category 1 - Warning (

CLP : Aquatic Chronic 1) H410

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : T+ ; N

Symbol(s) : T+ : Very toxic

N : Dangerous for the environment

R Phrase(s) : R45 : May cause cancer.

R46 : May cause heritable genetic damage.
 R60 : May impair fertility.
 R61 : May cause harm to the unborn child.
 R25 : Toxic if swallowed.
 R26 : Very toxic by inhalation.
 R48/23/25 : Toxic : danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
 R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 S Phrase(s) : S53 : Avoid exposure - obtain special instructions before use.
 S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
 S60 : This material and its container must be disposed of as hazardous waste.
 S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.



Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms MÅ M“ MÅ

Signal words : Danger

Hazard statements : H330 : Fatal if inhaled.

H301 : Toxic if swallowed.

H372 : Causes damage to organs through prolonged or repeated exposure.

H410 : Very toxic to aquatic life with long lasting effects.

Precautionary statements

- Prevention : P284: Wear respiratory protection.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust, fume, gas, mist, Vapors, spray.

P273: Avoid release to the environment.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

- Response : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P391: Collect spillage.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

P314: Get medical advice if you feel unwell.

- Storage : P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

- Disposal considerations : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Preparation : CADMIUM CHLORIDE (MONOHYDRATE) 98%

CAS No :35658-65-2

Substance.

Contains no other components or impurities which will influence the classification of the product.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation : Assure fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment is urgent (see on this label).

Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Causes damage to organs through prolonged or repeated exposure. Fatal if inhaled.

Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust.
Store away from other materials.
6.4. Reference to other sections
See section 8. Exposure controls/personal protection

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, Vapors, spray.

Technical protective measures : Provide good ventilation in process area to prevent formation of Vapor.

7.2. Conditions for safe storage, including any incompatibilities : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

- Respiratory protection : Wear respiratory protection.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Others : When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

Colour : White powder

Odor : Odorless

Odor threshold : No data available.

pH value : N/A

Melting point [°C] : No data available.

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : N/A

Flammability (solid, gas) : N/A

Flash point [°C] : N/A

Boiling point [°C] : N/A

Initial boiling point [°C] : N/A

Final boiling point [°C] : N/A

Evaporation rate : N/A

Vapor pressure [20°C] : N/A
Vapor pressure mm/Hg : N/A
Vapor density : N/A
Density [g/cm³] : 3,33
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : Freely soluble
Solubility in water : N/A
Log Pow octanol / water at 20°C : No data available.
Solubility : N/A
Viscosity at 40°C [mm²/s] : N/A
9.2. Other information
Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A
Oxidising properties : No data available.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity : Not established.
10.2. Chemical stability
Chemical stability : Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions
Hazardous reactions : Not established.
10.4. Conditions to avoid
Conditions to avoid : Direct sunlight. Extremely high or low temperatures.
10.5. Incompatible materials
Materials to avoid : Strong acids. Strong bases.
10.6. Hazardous decomposition products
Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute toxicity
• Inhalation : Fatal if inhaled.
• Dermal : Based on available data, the classification criteria are not met.
• Ingestion : Toxic if swallowed.
Corrosion : Based on available data, the classification criteria are not met.
Irritation : Based on available data, the classification criteria are not met.
Sensitization : Based on available data, the classification criteria are not met.
Mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : Based on available data, the classification criteria are not met.
Toxic for reproduction : Based on available data, the classification criteria are not met.
STOT-single exposure : Based on available data, the classification criteria are not met.
STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard : Based on available data, the classification criteria are not met.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity information : Very toxic to aquatic life with long lasting effects.

12.2. Persistence - degradability

Persistence - degradability : May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Special precautions : Hazardous waste due to toxicity.

SECTION 14. TRANSPORT INFORMATION

14.1. Land transport (ADR-RID)

Proper shipping name : CADMIUM COMPOUND

UN N° : 2570

H.I. nr : 60

ADR - Class : 6.1

Labelling - Transport : 6.1 : Toxic substances.

ADR - Classification code : T5

ADR - Group : III

ADR - Packing instructions : P002 R001 LP002

ADR - Limited Quantity : 5 KG

ADR - Tunnel code "«•»"

: E : Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

Proper shipping name : CADMIUM COMPOUND

UN N° : 2570

IMO-IMDG - Class or division : 6.1 : Toxic substances.

IMO-IMDG - Packing group : III

IMO-IMDG - Packing instructions : P002 LP02

IMO-IMDG - Limited quantities : 5 kg

IMO-IMDG - Marine pollution : Yes

EMS-Nr : F-A S-A

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : CADMIUM COMPOUND

UN N° : 2570

IATA - Class or division : 6.1 : Toxic substances.
IATA - Packing group : III
IATA - Passenger and Cargo Aircraft : ALLOWED
- Passenger and Cargo - Packing : 670
instruction
- Passenger and Cargo - Maximum : 100 kg
Quantity/Packing
IATA - Cargo only : ALLOWED
- Cargo only - Packing instruction : 677
- Cargo only - Maximum Quantity/ : 200 kg
Packing
IATA - Limited Quantities : 10 kg
ERG-Nr : 6L

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental : Ensure all national/local regulations are observed.

regulations/legislation specific for the

substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.