

# SAFETY DATA SHEET

Date Accessed: 05/01/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Name:** Ammonium Tetrachlorocuprate(II) Dihydrate

**Product Number:** All applicable American Elements product codes, e.g. AM-CUCL4-02.2HYD , AM-CUCL4-03.2HYD , AM-CUCL4-04.2HYD , AM-CUCL4-05.2HYD

**CAS #:** 10060-13-6

**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

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

**Label Elements**

Signal Word:

Warning

Hazard Statements

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Inhalation  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
Skin  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
Eyes  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
Storage  
Store in a well-ventilated place. Keep container tightly closed  
Store locked up  
Disposal  
Dispose of contents/container to an approved waste disposal plant  
Hazards not otherwise classified (HNOC)  
None identified

---

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component:  
Cuprate(2-), tetrachloro-, diammonium, dihydrate  
CAS-No.: 10060-13-6  
Weight %: <=100

---

### **SECTION 4. FIRST AID MEASURES**

General Advice If symptoms persist, call a physician.  
Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.  
Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.  
Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.  
Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.  
Most important symptoms and effects  
None reasonably foreseeable.  
Notes to Physician Treat symptomatically

---

### **SECTION 5. FIREFIGHTING MEASURES**

Suitable Extinguishing Media Not combustible.  
Unsuitable Extinguishing Media No information available  
Flash Point No information available

Method - No information available  
Autoignition Temperature No information available  
Explosion Limits  
Upper No data available  
Lower No data available  
Sensitivity to Mechanical Impact No information available  
Sensitivity to Static Discharge No information available  
Specific Hazards Arising from the Chemical  
Keep product and empty container away from heat and sources of ignition.  
Hazardous Combustion Products  
Nitrogen oxides (NOx). Hydrogen chloride. Ammonia. Copper oxides.  
Protective Equipment and Precautions for Firefighters  
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.  
NFPA  
Health - 2  
Flammability - 0  
Instability - 0  
Physical hazards -

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required.  
Avoid dust formation.  
Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological Information. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.  
Methods for Containment and Clean Up  
Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

---

## **SECTION 7. HANDLING AND STORAGE**

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.  
Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

---

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location.  
Personal Protective Equipment  
Eye/face Protection 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 and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.  
Respiratory Protection 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.  
Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

---

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State Solid Crystalline  
Appearance No information available  
Odor No information available  
Odor Threshold No information available  
pH No information available  
Melting Point/Range 110 °C / 230 °F  
Boiling Point/Range No information available  
Flash Point No information available  
Evaporation Rate Not applicable  
Flammability (solid,gas) No information available  
Flammability or explosive limits  
Upper No data available  
Lower No data available  
Vapor Pressure No information available  
Vapor Density Not applicable  
Specific Gravity 1.993 g/cm<sup>3</sup>  
Solubility No information available  
Partition coefficient; n-octanol/water No data available  
Autoignition Temperature No information available  
Decomposition Temperature No information available  
Viscosity Not applicable  
Molecular Formula  $\text{CuCl}_2 \cdot 2\text{NH}_4 \text{Cl} \cdot 2\text{H}_2\text{O}$   
Molecular Weight 277.46 (241.43anhy)

---

## **SECTION 10. STABILITY AND REACTIVITY**

Reactive Hazard None known, based on information available  
Stability Stable under normal conditions.  
Conditions to Avoid Incompatible products.  
Incompatible Materials Oxidizing agent  
Hazardous Decomposition Products Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride, Ammonia, Copper oxides  
Hazardous Polymerization Hazardous polymerization does not occur.  
Hazardous Reactions None under normal processing.

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute Toxicity  
Product Information  
Component Information  
Toxicologically Synergistic  
Products  
No information available  
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available  
Sensitization No information available  
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.  
Mutagenic Effects No information available  
Reproductive Effects No information available.  
Developmental Effects No information available.  
Teratogenicity No information available.  
STOT - single exposure Respiratory system  
STOT - repeated exposure None known  
Aspiration hazard No information available  
Symptoms / effects, both acute and delayed  
No information available  
Endocrine Disruptor Information No information available  
Other Adverse Effects The toxicological properties have not been fully investigated.

---

## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity  
May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.  
Persistence and Degradability based on information available. May persist  
Bioaccumulation/ Accumulation No information available.  
Mobility Will likely be mobile in the environment due to its water solubility.

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

---

## **SECTION 14. TRANSPORT INFORMATION**

DOT Not regulated  
TDG Not regulated  
IATA Not regulated  
IMDG/IMO Not regulated

---

## **SECTION 15. REGULATORY INFORMATION**

SARA 311/312 Hazard Categories See section 2 for more information  
Clean Air Act Not applicable  
OSHA - Occupational Safety and Health Administration  
Not applicable  
CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.  
U.S. Department of Transportation  
Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N  
U.S. Department of Homeland This product does not contain any DHS chemicals.  
Other International Regulations  
Mexico - Grade No information available

---

## **SECTION 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.