Harrell Industries, Inc.

SAFETY DATA SHEET

Issue Date 09-Apr-2015 **Revision Date** 09-Apr-2015 **Version** 1

1. IDENTIFICATION

Product identifier

Product Name Cupric Chloride, Dihydrate, ACS

Other means of identification

Product Code 1500
UN/ID no. UN2802
Synonyms Copper (II) Chloride, dihydrate

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals.
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address
Harrell Industries, Inc.
2495 Commerce Drive
Rock Hill, SC 29730

www.harrellindustries.com

Emergency telephone number

Company Phone Number 803-327-6335
Fax Number 803-327-7808
24 Hour Emergency Phone Number 800 633-8253 (PERS)

2. HAZARDS IDENTIFICATION

Classification

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

Acute toxicity - Oral	Category 1
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Label elements

Emergency Overview

Danger

Hazard statements
Harmful if swallowed
Causes eye irritation
May cause respiratory irritation
Causes skin irritation
Toxic to aquatic life with long lasting effects

WARNING! Harmful if swallowed. Causes irritation to skin, eyes, and respiratory tract.

Appearance Fine, light blue-green crystals **Physical state** Solid **Odor** Slight odor of hydrochloric acid

Precautionary Statements - Prevention
Keep only in original container
Wash skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid release to the environment
Wear eye/face protection
Wear protective gloves/protective clothing/eye protection/face protection

Causes severe irritation with symptoms of redness, pain, blurred vision, discoloration and possible eye damage.
Causes irritation, redness and pain.
Some individuals may develop copper allergies.
Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.
May result in ulceration and perforation of respiratory tract. When heated, it may give off a coppery fume, which can cause symptoms similar to the common cold (chills and stuffiness of the head).
May cause burning pain in mouth, esophagus, and stomach. Hemorrhagic gastritis, nausea, vomiting, abdominal pain, metallic taste, and diarrhea may occur. If vomiting does not occur immediately systematic copper poisoning may occur. Symptoms may include capillary damage, headache, cold sweat, weak pulse, kidney and liver damage, central nervous excitation followed by depression, jaundice, convulsions, blood effects, paralysis and coma. Death may occur from shock or renal failure.

Precautionary Statements - Storage
Store in a dry place
Store in a cool area
Store in a well-ventilated place. Keep container tightly closed
Wear appropriate personal protective equipment.

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Not applicable

Unknown acute toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Synonyms Copper (II) Chloride, dihydrate.
Formula CuCl2.2H20

Chemical Name	CAS No.	Weight-%
Cupric Chloride Dihydrate	10125-13-0	99

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician if irritation occurs.

Skin contact Wipe off excess material from skin. Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion Never give anything by mouth to an unconscious person. Induce vomiting immediately as directed by medical personnel. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray may be used to keep fire exposed containers cool.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Use a clean up method that does not generate dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids); observe all warnings and precautions listed for the product.

Incompatible materials Nitromethane. Hydrazine. Aluminum. Sodium Hypobromite. Potassium. Sodium. Strong oxidizers. Acetylene. Corrosive to aluminum; on contact with acids it may release toxic chloride fumes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cupric Chloride Dihydrate 10125-13-0	TWA: 1 mg/m³ Cu dust and mist	-	IDLH: 100 mg/m³ Cu dust and mist TWA: 1 mg/m³ Cu dust and mist

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and clean body-covering clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid		
Appearance	Fine, light blue-green crystals	**Odor**	Slight odor of hydrochloric acid
Color	Light blue-green	**Odor threshold**	No information available

Property	Values	Remarks • Method
pH	No information available	
Melting point / freezing point	70-200 °C / 158-392 °F	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	No information available	

Water solubility	Soluble in water
Solubility in other solvents	76 parts/ 100 parts water @ 25 @ .? °C
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.
Possibility of Hazardous Reactions
None under normal processing.
Conditions to avoid
Extremes of temperature and direct sunlight.
Incompatible materials
Nitromethane. Hydrazine. Aluminum. Sodium Hypobromite. Potassium. Sodium. Strong oxidizers. Acetylene. Corrosive to aluminum; on contact with acids it may release toxic chloride fumes.
Hazardous Decomposition Products
Oxides of the contained metal and halogen, possibly also free, or ionic halogen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

Information on toxicological effects

Symptoms	No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

This material is expected to be very toxic to aquatic life.

Ecotoxicity

Harmful to aquatic life This material is not expected to biodegrade when released into the soil. When released into the soil it may leach into groundwater. When released into water this material is not expected to evaporate significantly. It is expected to bioaccumulate.

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
Cupric Chloride Dihydrate 10125-13-0	Toxic

14. TRANSPORT INFORMATION

DOT Regulated
- **UN/ID no.** UN2802
- **Proper shipping name** Copper Chloride
- **Hazard Class** 8
- **Packing Group** III
- **Reportable Quantity (RQ)** 10 lbs (4.54 kg)
- **Marine pollutant** This material is expected to be very toxic to aquatic life.

TDG Regulated
- **UN/ID no.** UN2802
- **Proper shipping name** COPPER CHLORIDE
- **Hazard Class** 8
- **Packing Group** III
- **Marine pollutant** This product contains a chemical which is listed as a marine pollutant according to TDG.

MEX Regulated
- **UN/ID no.** UN2802
- **Proper shipping name** Copper Chloride
- **Hazard Class** 8
- **Packing Group** III

ICAO (air)	Regulated
UN/ID no.	UN2802
Proper shipping name	Copper Chloride
Hazard Class	8
Packing Group	III
IATA	Regulated
UN/ID no.	UN2802
Proper shipping name	Copper Chloride
Hazard Class	8
Packing Group	III
IMDG	Regulated
UN/ID no.	UN2802
Proper shipping name	Copper Chloride
Hazard Class	8
Packing Group	III
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
RID	Regulated
UN/ID no.	UN2802
Proper shipping name	Copper Chloride
Hazard Class	8
Packing Group	III
ADR	Regulated
UN/ID no.	UN2802
Proper shipping name	Copper Chloride
Hazard Class	8
Packing Group	III
ADN	Regulated
UN Number	UN2802
Proper shipping name	Copper Chloride
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Cupric Chloride Dihydrate - 10125-13-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Cupric Chloride Dihydrate 10125-13-0	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Cupric Chloride Dihydrate 10125-13-0	X	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards** 2	**Flammability** 0	**Instability** 1	**Physical and Chemical Properties** -
HMIS	**Health hazards** 0	**Flammability** 0	**Physical hazards** 0	**Personal protection** X

Issue Date 09-Apr-2015
Revision Date 09-Apr-2015
Revision Note
No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet