

Revision date: 09-03-2014

SAFETY DATA SHEET

1. Identification

Product identifier: CUPROUS CHLORIDE

Other means of identification

Product No.: 1862

Recommended use and restriction on use

Recommended use: Not available. Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: Avantor Performance Materials, Inc. Address: 3477 Corporate Parkway, Suite 200

Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: Environmental Health & Safety e-mail: info@avantormaterials.com

Emergency telephone number:

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard classification

Health hazards

Acute toxicity (Oral)

Skin corrosion/irritation

Category 4

Category 2

Serious eye damage/eye irritation

Category 2A

Environmental hazards

Acute hazards to the aquatic Category 1

environment

Chronic hazards to the aquatic Category 1

environment

Label elements

Hazard symbol:



Signal word: Warning

Hazard statement: Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

Very toxic to aquatic life with long lasting effects.



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Precautionary statement

Prevention: Wash hands thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection. Do not eat, drink or smoke when

using this product. Avoid release to the environment.

Response: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel

unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. 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. Collect spillage.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
COPPER CHLORIDE		7758-89-6	100%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do not

induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Inhalation: Move to fresh air. Get medical attention if symptoms persist. If breathing

stops, provide artificial respiration.

Skin contact: Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Symptoms: Irritating to eyes, respiratory system and skin.

Indication of immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures



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General fire hazards: In case of fire and/or explosion do not breathe fumes.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None known.

Specific hazards arising from

the chemical:

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or

spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning

Notification Procedures:

up:

Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Dike for later disposal. Prevent entry into waterways, sewer, basements or

confined areas. Stop the flow of material, if this is without risk. Inform

authorities if large amounts are involved.

Environmental precautions: Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so. Avoid discharge into drains, water courses or onto

the ground.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Do not breathe mist or

vapor. Do not taste or swallow. Do not eat, drink or smoke when using the product. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.

Avoid contact with eyes. Avoid contact with skin.

Conditions for safe storage,

including any incompatibilities:

Do not store in metal containers. Keep in a cool, well-ventilated place. Store in a dry place.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None of the components have assigned exposure limits.



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Appropriate engineering controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area.

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection: Chemical resistant gloves

Other: Wear suitable protective clothing.

Respiratory protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Provide eyewash station and safety shower. Observe good industrial

hygiene practices. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using the product.

Wash contaminated clothing before reuse.

9. Physical and chemical properties

Appearance

Physical state: Solid

Form: Crystals or powder.

Color: White Odor: Odorless

Odor threshold:

pH:

No data available.

No data available.

Melting point/freezing point: 430 °C Initial boiling point and boiling range: 1,490 °C

Flash Point:

Evaporation rate:

Flammability (solid, gas):

No data available.

No data available.

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

Vapor pressure:

Vapor density:

No data available.

No data available.

No data available.

No data available.

Solubility(ies)

Solubility in water: 6.2 g/l

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available.

No data available.

No data available.

No data available.



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Other information

Molecular weight: 99.00 g/mol (ClCu)

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Moisture. Sunlight. Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents. Acetylene. Potassium. Hydrazine. Heat, sparks,

flames.

Hazardous decomposition

products:

Halogens.

11. Toxicological information

Information on likely routes of exposure

Ingestion: Harmful if swallowed.

Inhalation: May be harmful if inhaled.

Skin contact: Causes skin irritation.

Eye contact: Causes serious eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin corrosion/irritation

Product: Causes skin irritation.

Serious eye damage/eye irritation

Product: Causes serious eye irritation.

Respiratory or skin sensitization

Product: Not a skin sensitizer.

Carcinogenicity

Product: This substance has no evidence of carcinogenic properties.



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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

Product: No mutagenic components identified

In vivo

Product: No mutagenic components identified

Reproductive toxicity

Product: No components toxic to reproduction

Specific target organ toxicity - single exposure
Product:
No data available.

Specific target organ toxicity - repeated exposure
Product:
No data available.

Aspiration hazard

Product: Not classified

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

COPPER CHLORIDE LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 0.149 -

0.215 mg/l Mortality

LC 50 (Cutthroat trout (Oncorhynchus clarki), 96 h): 0.168 - 0.205 mg/l

Mortality

LC 50 (Mummichog (Fundulus heteroclitus), 96 h): 0.4 mg/l Mortality

Aquatic invertebrates

Product: No data available.

Specified substance(s):

COPPER CHLORIDE LC 50 (Mysid (Acanthomysis costata), 96 h): 0.015 - 0.019 mg/l Mortality

LC 50 (Calanoid copepod (Acartia clausi), 96 h): 0.052 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic invertebrates

Product: No data available.

Toxicity to Aquatic Plants



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Product: No data available.

Persistence and degradability

Biodegradation

Product: There are no data on the degradability of this product.

BOD/COD ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)

Product: No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)
Product:
No data available.

Mobility in soil: The product is water soluble and may spread in water systems.

Other adverse effects: Very toxic to aquatic life with long lasting effects.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and

product characteristics at time of disposal.

Contaminated packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.

14. Transport information

DOT

UN number: UN 2802

UN proper shipping name: Copper chloride

Transport hazard class(es)

Class(es): 8
Label(s): 8
Packing group: III
Marine Pollutant: Yes

IMDG

UN number: UN 2802

UN proper shipping name: COPPER CHLORIDE

Transport hazard class(es)

Class(es): 8 Label(s): 8

EmS No.: F-A, S-B

Packing group: III
Marine Pollutant: Yes



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IATA

UN number: UN 2802
Proper Shipping Name: Copper chloride

Transport hazard class(es):

Class(es): 8
Label(s): 8

Marine Pollutant: No
Packing group: III

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories

V Acute (Immediate) Chronic (Deleved) Fire Decetive									
TX TACUTE (IMMEdiate) L. TCNTONIC (Delaved) L. TEITE L. TREACTIVE L. L.	Pressure Generating	ate)	(Acute (Immediate)	X	mediate)	(Immediate) Chronic (Delayed)	Fire	Reactive	Pressure Generating

SARA 302 Extremely hazardous substance

None present or none present in regulated quantities.

SARA 304 Emergency release notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous chemical

Chemical identity	Threshold Planning Quantity
COPPER CHI ORIDE	500 lbs

SARA 313 (TRI reporting)

	Reporting threshold for	Reporting threshold for manufacturing and	
Chemical identity	other users	processing	
COPPER CHLORIDE	10000 lbs	25000 lbs.	

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

COPPER CHLORIDE Listed

US. Massachusetts RTK - Substance List

COPPER CHLORIDE Listed



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US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

COPPER CHLORIDE Listed

Inventory Status:

Australia AICS:
Canada DSL Inventory List:
EINECS, ELINCS or NLP:
Japan (ENCS) List:

China Inv. Existing Chemical Substances:
Korea Existing Chemicals Inv. (KECI):
Canada NDSL Inventory:
Philippines PICCS:
US TSCA Inventory:

New Zealand Inventory of Chemicals:

Japan ISHL Listing:

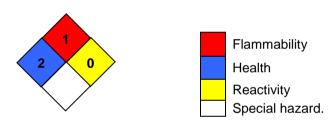
Japan Pharmacopoeia Listing:

On or in compliance with the inventory Not in compliance with the inventory. On or in compliance with the inventory Not in compliance with the inventory On or in compliance with the inventory

Not in compliance with the inventory.

16.Other information, including date of preparation or last revision

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 09-03-2014

Revision date: No data available.

Version #: 1.0

Further information: No data available.



Disclaimer:

Version: 1.0

Revision date: 09-03-2014

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