

## SAFETY DATA SHEET

Creation Date 22-January-2015

Revision Date 30-April-2019

Revision Number 6

### 1. Identification

**Product Name** Copper(I) iodide

**Cat No. :** AC201500000; AC201500050; AC201500250; AC201501000

**CAS-No** 7681-65-4  
**Synonyms** No information available

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

**Importer/Distributor**  
Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

**WHMIS 2015 Classification** Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

<b>Acute oral toxicity</b>	Category 4
<b>Skin Corrosion/irritation</b>	Category 2
<b>Serious Eye Damage/Eye Irritation</b>	Category 1
<b>Skin Sensitization</b>	Category 1A
<b>Specific target organ toxicity - (repeated exposure)</b>	Category 1
Target Organs - Thyroid.	

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Harmful if swallowed  
Causes skin irritation

May cause an allergic skin reaction  
 Causes serious eye damage  
 Causes damage to organs through prolonged or repeated exposure



### Precautionary Statements

#### Prevention

Do not breathe dust/fumes/gas/mist/vapours/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves/protective clothing/eye protection/face protection

#### Response

IF ON SKIN: Wash with plenty of soap and water  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER/doctor  
 Rinse mouth  
 Take off contaminated clothing

#### Disposal

Dispose of contents/container to an approved waste disposal plant

### Other Hazards

Very toxic to aquatic organisms  
 Toxic to aquatic life with long lasting effects  
 Light sensitive

## 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Copper iodide (CuI)	7681-65-4	<=100

## 4. First-aid measures

<b>General Advice</b>	If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Most important symptoms/effects</b>	Causes severe eye damage. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**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**

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Do not allow run-off from fire fighting to enter drains or water courses.

**Hazardous Combustion Products**

Copper oxides Hydrogen iodide

**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**  
3

**Flammability**  
0

**Instability**  
1

**Physical hazards**  
N/A

## 6. Accidental release measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

**Handling** Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from direct sunlight.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

Component	Alberta	British Columbia	Ontario TWA/EV	Quebec	ACGIH TLV	OSHA PEL	NIOSH IDLH
Copper iodide (CuI)			TWA: 0.01 ppm		TWA: 1 mg/m <sup>3</sup> TWA: 0.01 ppm		IDLH: 100 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

**Legend**

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH IDLH: *The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

#### Eye Protection

Goggles

#### Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Natural rubber	See manufacturers	-	Splash protection only
Nitrile rubber	recommendations		
Neoprene			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

### Respiratory Protection

No protective equipment is needed under normal use conditions.

### Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

## 9. Physical and chemical properties

Physical State	Solid
Appearance	Beige
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	605 °C / 1121 °F
Boiling Point/Range	1290 °C / 2354 °F @ 760 mmHg
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	10 mmHg @ 656 °C
Vapor Density	Not applicable
Density	5.62 g/cm <sup>3</sup> @ 20 °C
Specific Gravity	No information available
Bulk Density	&1.000 - 1.400 kg/m <sup>3</sup>
Solubility	Insoluble in water

Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	Cu I
Molecular Weight	190.45

## 10. Stability and reactivity

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Light sensitive.
<b>Conditions to Avoid</b>	Avoid dust formation. Incompatible products. Excess heat. Exposure to light.
<b>Incompatible Materials</b>	Oxidizing agents, Strong acids, Alkali metals
<b>Hazardous Decomposition Products</b>	Copper oxides, Hydrogen iodide
<b>Hazardous Polymerization</b>	No information available.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Acute Toxicity

#### Product Information Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Copper iodide (CuI)	300 - 2000 mg/kg	> 2000 mg/kg (OECD 402)	Not listed

**Toxicologically Synergistic Products** No information available

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

<b>Irritation</b>	Irritating to skin
<b>Sensitization</b>	May cause sensitization by skin contact
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Copper iodide (CuI)	7681-65-4	Not listed	Not listed	Not listed	Not listed	Not listed

<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	None known
<b>STOT - repeated exposure</b>	Thyroid
<b>Aspiration hazard</b>	No information available
<b>Symptoms / effects, both acute and delayed</b>	Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
<b>Endocrine Disruptor Information</b>	No information available

## Other Adverse Effects

## 12. Ecological information

**Ecotoxicity**

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Copper iodide (Cul)	EC50 = 0.13 mg/l (72h) green algae (OECD 201)	LC50 = 1.67 mg/l (96h) Oncorhynchus mykiss	EC50 = 280 mg/L (3h) Activated sludge (OECD 209)	EC50 = 0.59 mg/l (48h) Daphnia magna

**Persistence and Degradability** Insoluble in water May persist

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

## 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.

## 14. Transport information

**DOT**

**UN-No** UN3077  
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
**Proper technical name** Copper iodide (Cul)  
**Hazard Class** 9  
**Packing Group** III

**TDG**

**UN-No** UN3077  
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
**Hazard Class** 9  
**Packing Group** III

**IATA**

**UN-No** UN3077  
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
**Hazard Class** 9  
**Packing Group** III

**IMDG/IMO**

**UN-No** UN3077  
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
**Hazard Class** 9  
**Packing Group** III

## 15. Regulatory information

## International Inventories

Component	DSL	NDSL	TSCA	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Copper iodide (Cul)	X	-	X	231-674-6	-		X	X	X	X	KE-0894 1 97-3-718

## Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Component	Canada - National Pollutant	Canadian Environmental	Canada's Chemicals Management

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	Release Inventory (NPRI)	Protection Agency (CEPA) - List of Toxic Substances	Plan (CEPA)
Copper iodide (Cul)	Part 1, Group A Substance		

## 16. Other information

<b>Prepared By</b>	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
<b>Creation Date</b>	22-January-2015
<b>Revision Date</b>	30-April-2019
<b>Print Date</b>	30-April-2019
<b>Revision Summary</b>	This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of Chemicals.

### 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 SDS**