

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## Copper(I) oxide: sc-239580



### MATERIAL SAFETY DATA SHEET

#### **1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name:	Copper(I) oxide	
Product Number:	sc-239580	

Supplier:	Santa Cruz Biotechnology, Inc.
	2145 Delaware Avenue
	Santa Cruz, CA 95060
	800.457.3801 or 831.457.3800
Emergency:	ChemWatch
	Within the US & Canada: 877-715-9305
	Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

#### 2. HAZARDS IDENTIFICATION

Emergency Overview OSHA Hazards Toxic by ingestion GHS Classification Acute toxicity, Oral (Category 4) Acute toxicity, Dermal (Category 5) Eye irritation (Category 2B) Acute aquatic toxicity (Category 1) GHS Label elements, including precautionary statements Pictogram



Signal word	Warn	ing
Hazard statement(s		
H302	Harm	ful if swallowed.
H313	Мау	be harmful in contact with skin.
H320	Caus	es eye irritation.
H400		toxic to aquatic life.
Precautionary state	ment(s)	
P273	Avoid	I release to the environment.
P305 + P351	+ P338 IF IN	EYES: Rinse cautiously with water for several minutes. Remove contact
	lense	es, if present and easy to do. Continue rinsing.
HMIS Classification		
Health hazar	l: 2	
Flammability	: 0	
Physical haz	ards: 0	
NFPA Rating		
Health hazar	l: 0	
Fire:	0	
Reactivity Ha	zard: 0	
Potential Health Eff	ects	
Inhalation:	Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.	
Skin:	Skin: May be harmful if absorbed through skin. May cause skin irritation.	
Eyes:	May cause eye irr	itation.
Ingestion:	Toxic if swallowed	

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

Synonyms:	Cuprous oxide
Formula:	Cu2O
Molecular Weight:	143.09

CAS-No.	EC-No.	Index-No.	Concentration
Dicopper oxide			
1317-39-1	215-270-7	029-002-00-X	-

#### 4. FIRST AID MEASURES

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. **If inhaled** 

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

#### **Conditions of flammability**

Not flammable or combustible. Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Hazardous combustion products

Hazardous decomposition products formed under fire conditions - Copper oxides

#### 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Air and moisture sensitive. Keep in a dry place. Store at room temperature.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters					
	Components	CAS-No.	Value	Control	Basis
				parameters	
	Dicopper oxide	1317-39-1	TWA	1 mg/m3	USA. NIOSH Recommended Exposure Limits
			1		

### Personal protective equipment

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Melting point/freezing point Flash point Autoignition temperature Upper explosion limit Water solubility Odor Density Partition coefficient: n-octanol/water

**10. STABILITY AND REACTIVITY** 

powder 1,230 °C (2,246 °F) not applicable no data available no data available no data available no data available 6 g/mL at 25 °C (77 °F) no data available pH Boiling point Ignition temperature Lower explosion limit Vapor pressure Relative vapor density Odor Threshold Evaporation rate no data available no data available

Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions no data available Conditions to avoid Air. Avoid moisture. Materials to avoid Oxidizing agents Hazardous decomposition products

Hazardous decomposition products formed under fire conditions - Copper oxides **Other decomposition products** no data available

#### **11. TOXICOLOGICAL INFORMATION**

#### Acute toxicity

Oral LD50: LD50 Oral - rat - 470 mg/kg Inhalation LC50: LC50 Inhalation - rat - 4 h - > 50,000 mg/m3 Dermal LD50: LD50 Dermal - rat - > 2,000 mg/kg Other information on acute toxicity: no data available

#### Skin corrosion/irritation

Skin- rabbit- No skin irritation

Serious eye damage/eye irritation

#### Eyes - rabbit - Mild eye irritation

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Reproductive toxicity**

Reproductive toxicity - rat - Inhalation

Effects on Fertility: Male fertility index (e.g., # males impregnating females per # males exposed to fertile nonpregnant females).

#### Teratogenicity

#### no data available

### Specific target organ toxicity - single exposure (Globally Harmonized System)

#### no data available

#### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

#### no data available

Aspiration hazard

#### no data available

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes:** May cause eye irritation.
- Ingestion: Toxic if swallowed.

#### Signs and Symptoms of Exposure

Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse, and kidney and liver damage, central nervous system excitation followed by depression, jaundice, convulsions, paralysis, and coma. Death may occur from shock or renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis.

Synergistic effects no data available Additional Information RTECS: GL8050000

#### **12. ECOLOGICAL INFORMATION**

**PBT and vPvB assessment** no data available Persistence and degradability no data available

#### **Bioaccumulative potential**

#### Mobility in soil no data available

#### no data available Toxicity

Toxicity to fish: LC50 - Cyprinodon variegatus (sheepshead minnow) - > 0.17 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 0.5 mg/l - 48 h Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life. Avoid release to the environment.

#### **13. DISPOSAL CONSIDERATIONS**

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

#### **14. TRANSPORT INFORMATION**

DOT (US) Not dangerous goods IMDG		
UN number: 3077 Class: 9 Proper shipping name: ENVIRONMENTALLY HAZARI Marine pollutant: Marine pollutant		
UN number: 3077 Class: 9 Proper shipping name: Environmentally hazardous so Further information	Packing group: III ubstance, solid, n.o.s. (Dicopper oxide)	
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.		
15. REGULATORY INFORMATION		
OSHA Hazards		
Toxic by ingestion SARA 302 Components		
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components		
The following components are subject to reporting le Dicopper oxide	vels established by SARA Title III, Section 313: CAS-No.: 1317-39-1	
SARA 311/312 Hazards Acute Health Hazard		
Massachusetts Right To Know Components No components are subject to the Massachusetts Ri Pennsylvania Right To Know Components	ght to Know Act.	
Dicopper oxide	CAS-No.: 1317-39-1	
New Jersey Dight To Know Components		

#### New Jersey Right To Know Components Dicopper oxide

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

CAS-No.: 1317-39-1

#### **16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

8/13/2012