

# Antioxidant Copper

## Safety Data Sheet

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : Antioxidant Copper

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Repelling moisture to prevent corrosion between mating surfaces.

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

Harger  
301 Ziegler Drive  
Grayslake, IL 60030  
T 847-548-8700 - F 847-548-8755

#### 1.4. Emergency telephone number

No additional information available

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin Sens. 1 H317  
Carc. 1B H350  
Aquatic Acute 1 H400

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction  
H350 - May cause cancer  
H400 - Very toxic to aquatic life

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P321 - Specific treatment (see label)  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
P362+P364 - Take off contaminated clothing and wash it before reuse  
P391 - Collect spillage  
P405 - Store locked up  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

Full text of H-phrases: see section 16

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Castor oil, reaction products with TDI	(CAS No) 70024-98-5	70 - 80	Not classified
Copper	(CAS No) 7440-50-8	5 - 15	Not classified

# Antioxidant Copper

## Safety Data Sheet

Name	Product identifier	%	GHS-US classification
Dimethyl silicone polymer with silica	(CAS No) 67762-90-7	5 - 10	Not classified
1,3,4-Thiadiazole, 2,5-bis(octylidithio)-	(CAS No) 13539-13-4	> 1	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Distillates, petroleum, hydrotreated heavy naphthenic	(CAS No) 64742-52-5	> 1	Carc. 1B, H350
Tolutriazole compound	None	> 1	Not classified

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: No specific first aid necessary for this route of exposure.
First-aid measures after skin contact	: Wash with soap and water. Seek medical advice if skin irritation develops or persists.
First-aid measures after eye contact	: Flush with water for at least 15 minutes, consult a physician.
First-aid measures after ingestion	: Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: None under normal use.
Symptoms/injuries after skin contact	: May cause irritation.
Symptoms/injuries after eye contact	: May cause irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Foam, carbon dioxide, dry chemical.
Unsuitable extinguishing media	: None.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Fire may produce dense, black smoke, and noxious copper compounds.
Explosion hazard	: None known.

#### 5.3. Advice for firefighters

Protection during firefighting	: Firefighters should wear full protective gear.
--------------------------------	--------------------------------------------------

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment	: No special measures required.
Methods for cleaning up	: Scoop up material. Use sand, earth, sawdust, or other absorbent if necessary.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Wash thoroughly after handling.
-------------------------------	-----------------------------------

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in closed containers. Protect from contamination with other materials. Do not transfer into unmarked containers.
--------------------	--------------------------------------------------------------------------------------------------------------------------

#### 7.3. Specific end use(s)

Repelling moisture to prevent corrosion between mating surfaces.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

# Antioxidant Copper

## Safety Data Sheet

Copper (7440-50-8)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

### 8.2. Exposure controls

Appropriate engineering controls	: None required under normal product handling conditions.
Hand protection	: Chemical resistant gloves.
Eye protection	: Safety glasses. Protective goggles.
Skin and body protection	: Wear suitable working clothes.
Respiratory protection	: None necessary.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Thick grease
Color	: Copper
Odor	: Mild
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 500 °F
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Specific gravity	: 1.07
Solubility	: Insoluble.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

VOC content	: No data available
-------------	---------------------

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

### 10.3. Possibility of hazardous reactions

Will not occur.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

Contact with oxidizing material, acids, alkalis, chlorates, and bromates.

### 10.6. Hazardous decomposition products

Oxides of carbon, dense black smoke.

# Antioxidant Copper

## Safety Data Sheet

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>Copper (7440-50-8)</b>	
LC50 fishes 1	0.0068 - 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 other aquatic organisms 1	0.0426 - 0.0535 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])
LC50 fish 2	< 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 other aquatic organisms 2	0.031 - 0.054 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])

  

<b>Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)</b>	
LC50 fishes 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

### SECTION 14: Transport information

In accordance with DOT

#### 14.1. UN number

No dangerous good in sense of transport regulations

#### 14.2. UN proper shipping name

Not applicable

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### **1,3,4-Thiadiazole, 2,5-bis(octyldithio)- (13539-13-4)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

##### **Castor oil, reaction products with TDI (70024-98-5)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# Antioxidant Copper

## Safety Data Sheet

### Copper (7440-50-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 313 - Emission Reporting 1.0 %

### Dimethyl silicone polymer with silica (67762-90-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## 15.2. US State regulations

### Copper (7440-50-8)

U.S. - Massachusetts - Right To Know List

U.S. - Minnesota - Hazardous Substance List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — AcuteHazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H350	May cause cancer
H400	Very toxic to aquatic life

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*