

# Safety Data Sheet: Tenuazonic Acid copper salt

## 1) Identification of the substance/mixture and of the Company

Product identifiers			
Product name	Tenuazonic acid Copper salt	CAS RN #	12427-40-6
Product code	TNZ	EC Number	
		Formula	(C <sub>10</sub> H <sub>14</sub> NO <sub>3</sub> ) <sub>2</sub> Cu
Intended uses of the substance or mixture and uses advised against			
Intended use		Uses advised against:	
Only for Research and/or Development		Not for drug, Not to be used in humans or animals. Not food additive	
Details of the supplier of the safety data sheet		Emergency Telephone number	
<b>FERMENTEK Ltd</b> 4 Yatziv street, POB 47120 Jerusalem 97800, Israel		For chemical emergency spill, leak, fire, exposure, or accident calls CHEMTREC day or night: Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887	
This company is the manufacturer of the product, and the supplier of the safety data sheet			

### REACH

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

## 2) Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) 1272/2008 [EU-GHS/CLP]

Acute Toxicity, Oral (Category 3) H301: Toxic if swallowed

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

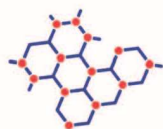
Harmful if swallowed

### 2.2 Label elements, including precautionary statements

Pictogram:  Signal word: {Danger}

GHS Hazard Statements H301: Toxic if swallowed

GHS Precautionary Statements P281: Use personal protective equipment as required  
P201 P201: Obtain special instructions before use.



P202

P202: Do not handle until all safety precautions have been read and understood.

### 3) **Composition/information on ingredients**

Substance	
Substance name:	Tenuazonic Acid copper salt
Formula	(C <sub>10</sub> H <sub>14</sub> NO <sub>3</sub> ) <sub>2</sub> Cu
CAS RN #	12427-40-6
Amount/concentration	>95% w/w
Classification	Acute Toxicity, Oral (Category 3)
Mixture	
Not mixture.	

### 4) **First Aid Measures**

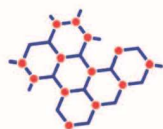
#### 4.1 Description of First Aid Measures

<b>General advice:</b>	If medical attention is required, show this safety data sheet to the doctor.
<b>Eye contact:</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Skin Contact:</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician.
<b>Ingestion:</b>	Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician
<b>Inhalation:</b>	Immediate medical attention is required Remove to fresh air If not breathing, give artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary Call a physician Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician
<b>Self-protection of the first aider:</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### 5) **Fire-fighting measures**

#### Extinguishing media

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	None
<b>Hazardous combustion products</b>	Carbon oxides, Nitrogen oxides
<b>Advice for firefighters</b>	Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit.



## 6) Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

### Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

### Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up: Cover liquid spill with sand, earth or other non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, and vermiculite). Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal.

## 7) Handling and storage

### Precautions for safe handling

Advice on safe handling: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place.

Keep out of the reach of children.

Store at -20 °C.

Incompatible materials: Strong oxidizers..

## 8) Exposure Controls/Personal Protection

No occupational exposure limits are listed for this material.

OSHA Permissible Exposure Limits No Data Available

NIOSH Recommended Exposure Limits No Data Available

ACGIH Threshold Limit Values No Data Available

### Exposure controls

#### Appropriate engineering controls

Engineering Controls Showers, Eyewash stations, Ventilation systems

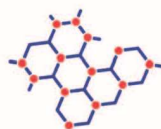
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Use fumehood for routine work.

#### Personal protective equipment

The employer/end user, prior to use of this product should perform all recommendations below are advisory in nature and a risk assessment. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

[PPE=Personal Protection Equipment]

PPE: Respiratory protection Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



PPE: Hand Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands

PPE: Eye Protection: Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

PPE: Skin and Body Protection: Handle with gloves. Wear protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place. When deemed needed according to the concentration and amount of this product, use a complete body suit

## 9) Physical and chemical properties

### Physical / chemical properties

Physical State at room temperature	Solid / powder
Color	
Melting/freezing point	
No further safety-relevant information is available	

## 10) Stability and reactivity

**Reactivity:** No information available.

**Chemical stability:** Stable under normal conditions.

**Conditions to avoid** Heat, flames and sparks. Sunlight.

**Incompatible materials** Strong reducers and oxidizers

**Possibility of Hazardous Reactions** None under normal processing

**Hazardous decomposition products:** Carbon oxides, Nitrogen oxides

## 11) Toxicological information

### Information on toxicological effects

The toxicological effects of this product have not been thoroughly studied.

Acute Toxicity	LD50 (oral - mouse)	225 mg/kg
Skin corrosion/irritation:	No data available	
Serious eye damage/eye irritation:	No data available	
Respiratory or skin sensitization:	No data available	
Germ cell mutagenicity:	No data available	
Carcinogenicity:	IARC: Not identified as probable/possible/confirmed human carcinogen.	
Reproductive toxicity / Teratogenicity:	No data available	
STOT-SE – single exposure (GHS):	No data available	
STOT-RE – repeated exposure (GHS):	No data available	
Aspiration hazard:	No data available	

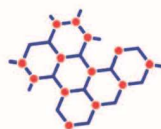
### Potential Health Effects

**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** No information available.  
**Additional information:** N.A.

## 12) Ecological Information

**Eco-Toxicity** No further relevant information available  
**Other adverse effects** No further relevant information available.

## 13) Disposal Considerations

### Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations
Contaminated packaging	Dispose of as unused product

## 14) Transport information

### UN number, Proper Shipping Name, Transport Hazard Class, packing group

	US DOT	ADR/RID:	IMDG:	IATA
UN Number	3462	3462	3462	3462
UN proper shipping name	Toxins, extracted from living sources, solid, n.o.s. *(contains tenuazonic acid, Copper salt)	Toxins, extracted from living sources, solid, n.o.s. *(contains tenuazonic acid, Copper salt)	Toxins, extracted from living sources, solid, n.o.s. *(contains tenuazonic acid, Copper salt)	Toxins, extracted from living sources, solid, n.o.s. *(contains tenuazonic acid, Copper salt)
Transport Hazard Class & Packing Group	6.1 Pg III	6.1 Pg III	6.1 Pg III	6.1 Pg III

## 15) Regulatory information

### Safety, health and environmental regulations/legislation

USA EPA / TSCA	This product is not listed on the USA EPA TSCA
EU ECHA Status	This product is not registered with the EU ECHA
CA: DSL/NDL Status	This product is not listed on the Canadian DSL/NDL

## 16) Other information

**Date of revision: 23 May 2017**

### 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 here is designed only as 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 →