



## PRODUCT DATA SHEET

### SECTION 1: IDENTIFICATION OF THE ARTICLE AND OF THE COMPANY

Identification of the article	<b>ETP COPPER PRODUCTS</b>
Use of the article	Tubes, Wires and drawn bars (of various cross sections) for Electrical applications according to (EN 13600, EN 13601, ASTM B49) Sheets, Strips and Circles (EN 1652, EN 13599, ASTM B152)
Article Producer / Company identification	SOFIA MED S.A Gara Iskar, 4 Dimitar Peshev str., 1528 Sofia, Bulgaria Tel: +359 2 960 6209 Fax: +359 2 960 6393 E-mail: <a href="mailto:info@sofiamed.bg">info@sofiamed.bg</a> Web: <a href="http://www.sofiamed.bg/">http://www.sofiamed.bg/</a>
Chemical Name	ETP COPPER
Synonym	NOT APPLICABLE
Chemical Formula	Cu
CAS number	7440-50-8
EINECS number	231-159-6
REACH Registration number	Cu: 01-2119480154-42-0045
Data Sheet Responsible	Vasil Harizanov <a href="mailto:vharizanov@sofiamed.bg">vharizanov@sofiamed.bg</a>
Emergency phone	+359 2 9154 409 (available only during office hours)
Remarks	ETP Copper Products are articles according to REACH Regulation EC/1907/2006. For article there is no legal obligation to issue a safety data sheet. However, to be able to provide information typically included in a safety data sheet also for articles, the present safety data sheet for articles has been voluntarily issued.

### SECTION 2: HAZARDS IDENTIFICATION

Physical/chemical hazards	The Copper in form of ETP COPPER PRODUCTS is not dangerous. Copper dust may potentially increase the risk of fire and explosion (sensitive to static discharge). Liquid Copper explodes in contact with water.
Human health hazards	The Copper in form of ETP COPPER PRODUCTS is not dangerous. Copper dust or fumes may cause irritation to respiratory tract and to the eyes. Irritating to skin. Harmful by ingestion.
Environmental hazards	Not applicable

### SECTION 3: COMPOSITION / INGREDIENTS

Chemical Name	CAS	Concentration (c.a.)	EU N°	SYMBOL	Risk Phrases
COPPER	7440-50-8	> 99.90%	231-159-6	-	-

### SECTION 4: FIRST-AID MEASURES

The below first aid measures are applicable when dust is generated from processing.

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Inhalation	Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention in event of any complaints.
Skin	Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing and clean shoes before reuse. If irritation persists, consult a specialist.
Eyes	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. If irritation persists, consult an eye specialist.
Ingestion	Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Note to Physician	Not applicable

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#### SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media suitable	Not inflammable extinguishing media appropriate to surrounding fire conditions. (note: very finely divided particles – ultra – fine powder – may burn in air).
Special Procedures	Not applicable
Personal Protection Equipment	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear (level protection: C)

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#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill/Leaks	Not applicable. If exist copper dust, ventilate area of spill. Sweep up and containerize for reclamation or disposal. Do not allow to enter in sewage system. Vacuuming or wet sweeping may be used to avoid dust dispersal. Wear appropriate personal protective equipment (level protection C).
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#### SECTION 7: HANDLING AND STORAGE

Handling	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid generation of dust. Do not ingest or inhale. Do not allow contact with moisture.
Storage	Keep in a tight closed container. Protect from physical damage. Store in a dry, ventilated area away from moisture and incompatibilities.

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#### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls	Handle in ventilated area.
Occupational Exposure Limits Copper	TWA: 1 mg/m <sup>3</sup> as Copper dust or mist (AGGIH, 2000).
Personal Protective Equipment Respirators	Not need generally. A respiratory protection program that meets OSHA'S 29 CFR : 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's

	use.
Skin	Material: Leather
Eyes	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA'S eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.
Clothing	Safety shoes; wear appropriate protective clothing

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Appearance and odor	Redish metal, odorless
pH	Not applicable
Decomposition Temperature	Not applicable
Flash point	Not applicable
Auto Ignition Temperature	Not applicable
Explosives properties	Not applicable
Fire or explosion hazard	Not applicable
Vapor Pressure (20°C)	Not applicable
Vapor Density	Not applicable
Solubility (water)	Insoluble
Freezing/Melting Point	1083 °C
Boiling Point	2595 °C
Specific Gravity/Density	8.94 (water=1)

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## SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Contact incompatibilities materials, prolonged exposure to air and moisture.
Incompatibilities with Other Materials	Copper is incompatible with oxidizers, alkalis, acetylene, chlorine plus oxygen difluoride, phosphorus, nitric acid, potassium peroxide, 1-bromo-2-propyne, sulphur plus chlorates. Reacts violently with ammonium nitrate, bromates, iodates, chlorates, ethylene oxide, hydrozoic acid, potassium oxide, dimethyl sulfoxide plus trichloroacetic acid, hydrogen peroxide, sodium peroxide, sodium azide, sulphuric acid, hydrogen sulphide plus air, and lead azide. A potentially explosive reaction occurs with acetylenic compounds. Copper ignities on contact with chlorine, fluorine (above 121 °C, chlorine trifluoride, and hydrazinum nitrate (above 70 °C). An incandescent reaction occurs with potassium dioxide.
Hazardous Decomposition Products	Fumes metals
Hazardous Polymerization	Not applicable

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## SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:	
Inhalation	Inhalation of dust may cause irritation of the respiratory tract. May cause congestion of nasal mucous membranes. Is possible ulceration and

Contact with skin	perforation of the nasal septum. Inhalation of material fumes causes metal fume fever (symptom similar to strong grippe).
Contact with eyes	Causes irritation to skin. Symptoms include redness, itching, and pain. Exposure to copper dust may cause a greenish-black skin discoloration. Small copper particles in the eyes may cause irritation, discoloration and damage.
Ingestion	Copper ingestion causes nausea, vomiting, abdominal pain, metallic taste, and diarrhea. Ingestion of large doses may cause stomach and intestine ulceration, jaundice, and kidney and liver damage.
Chronic effects	Prolonged or repeated exposure to copper can discolour skin and hair and irritate the skin; may cause mild dermatitis, runny nose, and irritation of the mucous membranes. Repeated ingestion may damage the liver and kidneys. Repeated inhalation can cause chronic respiratory disease.
LD50/LC50	Oral (TDLo, Rats): 152 mg/kg; Oral (TDLo, Human): 0,12 mg/kg
Aggravation of Pre-existing Conditions	Persons with pre-existing skin disorders or impaired liver, kidney, or pulmonary function or pre-existing Wilson's disease may be more susceptible to the effects of this material.
Other information	Copper is not listed as a dangerous substance in EEC and IMDG code IDLH (Immediately Dangerous Life Health): 100 mg/m3 (Copper dust or mist) It does not have cancer risk.

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**SECTION 12: ECOLOGICAL INFORMATION**

Persistence/	Not applicable
Bio-accumulation	Not applicable
Environment effects	May form sediments in aqueous bottom.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in a manner consistent with federal, state, and local regulations.

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**SECTION 14: TRANSPORT INFORMATION**

UN N°	Not applicable
Road/Rail Transport	
Shipping Name	ETP COPPER PRODUCTS
ADR/RID Class	Not regulated
ADR/RID Item Number	Not regulated
Packing Group	Not regulated
Identification Hazard Number	Not regulated
Sea Transport	
Shipping Name	ETP COPPER PRODUCTS
IMGD Class	Not regulated
Packing Group	Not regulated

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**SECTION 15: REGULATORY INFORMATION**

UE Classification (67/548/EEC-88/379/EEC)

Hazard symbol Not applicable  
Risk phrases Not applicable  
Safety phrases S 37 Wear suitable gloves.

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**SECTION 16: OTHER INFORMATION**

Not applicable

**Disclaimer of Liability**

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control. The user therefore assumes all risks of use of the product and we expressly disclaim all warranties of every kind and nature including warranties of merchantability and fitness for a particular purpose.

Handling Storage use and disposal of the product, as soon as is removed from our facility is beyond our control, and may be beyond our knowledge.

We therefore do not assume responsibility for loss damage, or expense arising from improper handling, storage use or disposal of the product.