

# MATERIAL SAFETY DATA SHEET.

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# 1. <u>IDENTIFICATION OF THE SUBSTANCE AND COMPANY.</u>

#### Identification of the substance.

Extruded, seamless copper tube.

# Identification of the Company.

Yorkshire Copper Tube, East Lancashire Road, Kirkby, Liverpool, Merseyside, United Kingdom. Post Code: L33 7TU.

# 2. <u>COMPOSITION/INFORMATION.</u>

# Composition.

COMPONENT	%	EINECS NO.	SYMBOL	R-PHRASES	S-PHRASES
Copper	99.90	231 - 159 - 6	N/A	N/A	N/A
	min.				

#### Description.

This product is extruded as a seamless tube from solid copper.

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#### 3. <u>HAZARDS IDENTIFICATION.</u>

There are no hazards to health of humans in solid form.

In high concentrations copper oxide dust is a mechanical irritant to eyes and upper respiratory tract, causing symptoms similar to "metal fume fever", which may last up to 24 hours. There are no known permanent effects. However, when used in accordance with manufacturer's instructions no particulates should be generated.

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# 4. FIRST AID MEASURES.

Inhalation: Extreme amounts of copper dust may be irritant to the upper respiratory tract. Remove to fresh air. Seek medical attention.

Skin Contact: Non-irritant. Rinse affected area with water as a precaution.

Eye Contact: Flush eyes with copious amounts of water. Seek medical

attention.

Ingestion: Drink plenty of water.

# 5. FIRE FIGHTING MEASURES.

Copper is non-flammable and indeed does not melt below 1083°C.

# 6. <u>ACCIDENTAL RELEASE MEASURES.</u>

#### **Environmental Precautions.**

Do not flush copper filings or copper oxide dust to drain. Prevent filings or dust from entering natural water courses.

# 7. HANDLING AND STORAGE.

#### Handling.

Under normal circumstances, may be handled without personal protective equipment, however, it is advisable to wear suitable cut-resistant gloves when cutting with a hacksaw.

#### Storage.

No special precautions are necessary. Store in a horizontal position, preferably indoors, to prevent ingress of dust, dirt etc.

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# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

COMPONENT	CAS	EINECS	LTEL	R-	STEL
	NO.	NO.	(8 hours)	PHRASE	(15 mins.)
Copper fume	7440 - 50 - 8	231 - 159 - 6	$0.2$ mg/m $^3$	N/A	
Copper dust/mist	7440 - 50 - 8		1 mg/m <sup>3</sup>		$2 \text{ mg/m}^3$

LTEL = Long term exposure limit.

STEL = Short term exposure limit

# **Engineering Measures.**

Not applicable.

#### **Respiratory Protection.**

Not necessary when used in accordance with manufacturer's instructions.

# **Eye Protection.**

During cutting and soldering operations, eye protection to British Standard 2092/EN166 should be worn.

#### **Skin Protection.**

During cutting and soldering operations, it is recommended that suitable hand protection is worn.

# 9. PHYSICAL AND CHEMICAL PROPERTIES.

ODOUD	N	MELTING DODUT	100200
ODOUR	None	MELTING POINT	1083℃
 DENSITY	8.93g/cm <sup>3</sup>	FLAMMABILITY	None

# 10. STABILITY AND REACTIVITY.

# Stability.

Fully stable.

#### **Conditions To Avoid.**

Excessive exposure to the elements will result in formation of a protective oxide layer which nevertheless gives the material a surface tarnish. In potentially corrosive environments protection of the pipework may be afforded by the use of a factory-applied, plastics covering (refer to manufacturer for further details).

#### **Hazardous Decomposition Products.**

None.

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### 11. <u>TOXICOLOGICAL INFORMATION.</u>

## **EEC Substance/Preparation Toxicity Classification.**

Oral LD50 (Rat)
Dermal LD50 (Rabbit)
Inhalation LC50 (4 Hr. Rat)
Skin Irritation (Rabbit)
Eye Irritation (Rabbit)
Dermal Sensitisation
Inhalation Sensitation
AMES Test

Not classified under any of the above.

#### **Potential Health Effects.**

The product is entirely suitable for use in conjunction with potable (i.e. drinking) waters.

#### Hazardous Ingredients Toxicity Data.

NOHE.
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# 12. ECOLOGICAL INFORMATION.

Copper in large quantities may cause pollution of the water course with subsequent deterioration of water quality which may cause harm to aquatic life forms. However, the human body requires 2.5 to 5.0 mg of copper per day to maintain health. Copper is an essential trace element in maintaining the general well-being of humans.

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#### 13. DISPOSAL CONSIDERATIONS.

Copper is a fully recyclable metal and therefore no waste should ensue from its use. Where scrap is generated, local non-ferrous scrap handlers should be contacted.

# 14. TRANSPORT INFORMATION.

Copper is a non-regulated material by land, sea or air.

# 15. REGULATORY INFORMATION.

**EEC Marking And Labelling.** 

Not applicable.

# 16. OTHER INFORMATION.

None.			