

# Material Safety Data Sheet

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

### 1.1. Product identifier

Trade name or designation of the mixture    HS10

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

Identified uses                                      Wire for soft solder

Uses advised against                                None known

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

Company name                                        : Premier Farnell  
Address    : 150 Armley Road  
    Leeds LS12 2QQ  
    Tel. : +44 (0) 870 129 8608  
Emergency Contacts                                : +44 (0) 870 202530

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Remark: The classification for this article has been derived with the use of the regulations for mixtures.

#### Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	May cause sensitisation by skin contact.
Main symptoms	Not available.

### 2.2. Label elements

#### Label according to Directive 67/548/EEC or 1999/45/EC as amended

EC number	-
EC label	Not available.
R-phrases	Not available.
S-phrases	Not available.
Authorisation number	Not available.
Supplemental label information	Not applicable.

### 2.3. Other hazards

Remark: As an article, this product has not to be labelled pursuant to current EU-regulation.

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## Section 3: Composition/information on ingredients

### 3.1. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	Reach Registration No.	Index No.	Notes
tin Classification: DSD: - CLP: -	96.5 - 99.5	7440-31-5 231-141-8	-	-	#
Copper Metal Classification: DSD: - CLP: -	0.5 - 3.5	7440-50-8 231-159-6	-	-	
Rosin Classification: DSD: R43 CLP: Skin Sens. 1;H317	<= 3.8	8050-09-7 232-475-7	-	650-015-00-7	

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

#: This substance has been assigned Community workplace exposure limit(s).

## Section 4: First aid measures

General information Not available.

### 4.1. Description of first aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.
Eye contact	Remove contact lenses, if present and easy to do. Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical advice/attention if you feel unwell.

**4.2. Most important symptoms and effects, both acute and delayed** Not available.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically. Symptoms may be delayed.

## Section 5: Firefighting measures

General fire hazards Not available.

### 5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

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Unsuitable extinguishing media

Water, CO2 or Foam

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

The product itself does not burn. Hot melt

## 5.3. Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

Special fire fighting procedures

Water runoff can cause environmental damage.

## Section 6: Accidental release measures

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

For non-emergency personnel

Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up.

For emergency responders

Not available.

### 6.2. Environmental precautions

Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground.

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

Remove material, as much as possible, using mechanical equipment. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. For waste disposal, see section 13.

### 6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Use only with adequate ventilation. Avoid inhalation of vapours and aerosol spray. Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Avoid release to the environment. Use care in handling/storage.

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

Store in a dry place. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

### 7.3. Specific end use(s)

Not available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Copper Metal (7440-50-8)	STEL	2 mg/m <sup>3</sup>	Inhalable dusts and mists.
	TWA	1 mg/m <sup>3</sup>	Inhalable dusts and mists.
		0.2 mg/m <sup>3</sup>	Fume.
Rosin (8050-09-7)	STEL	0.15 mg/m <sup>3</sup>	Fume.
	TWA	0.05 mg/m <sup>3</sup>	Fume.

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## EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
TIN (7440-31-5)	TWA	2 mg/m3

### Biological limit values

### Recommended monitoring procedures

No biological exposure limits noted for the ingredient(s).  
Follow standard monitoring procedures.

### 8.2. Exposure controls

#### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide adequate general and local exhaust ventilation.

#### Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical goggles are recommended.

Skin protection

- Hand protection

- Other

Use protective gloves made of: Leather

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards

Thermally protective gloves are recommended. If contact with forearms is likely, wear gauntlet-style gloves. Avoid contact with molten material.

Hygiene measures

Avoid contact with skin. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practices. Avoid contact with eyes.

Environmental exposure controls

Not available.

## Section 9: Physical and chemical properties

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

#### Appearance

Physical state

Solid.

Form

Roll.

Colour

Metallic.

Odour

Odourless.

Odour threshold

Not available.

pH

Not applicable.

Melting point/freezing point

227°C - 310°C (440.6°F - 590°F)

Initial boiling point and boiling range

Not available.

Flash point

Not applicable.

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Evaporation rate Not applicable.  
Flammability (solid, gas) Not applicable.

## Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.  
Flammability limit - upper (%) Not available.  
Vapour pressure Not applicable.  
Vapour density Not applicable.  
Relative density Not available.  
Solubility(ies) insoluble  
Partition coefficient (n-octanol/water) Not available.  
Decomposition temperature Not available.  
Viscosity Not applicable.  
Explosive properties Not available.  
Oxidizing properties Not available.

## 9.2. Other information

Density 7 - 9g/ml @ 20°C

## Section 10: Stability and reactivity

**10.1. Reactivity** Strong oxidizing agents.  
**10.2. Chemical stability** Material is stable under normal conditions.  
**10.3. Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.  
**10.4. Conditions to avoid** None under normal conditions.  
**10.5. Incompatible materials** Acids. Chlorine.  
**10.6. Hazardous decomposition products** Not available.

## Section 11: Toxicological information

General information Not available.  
Information on likely routes of exposure  
Ingestion Not available.  
Inhalation Not available.  
Skin contact Not available.  
Eye contact Not available.  
Symptoms Not available.

### 11.1. Information on toxicological effects

Components	Species	Test results
Copper Metal (7440-50-8) <b>Acute</b> Dermal LD50	Rat	> 2000 mg/kg, OECD Guideline 402
Oral LD50	Rat	> 2500 mg/kg, OECD Guideline 401

Skin corrosion/irritation Not available.

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Serious eye damage/irritation	Not available.
Respiratory sensitisation	Not available.
Skin sensitisation	Not available.
Germ cell mutagenicity	Not available.
Carcinogenicity	Not available.
Reproductive toxicity	Not available.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity -repeated exposure	Not available.
Aspiration hazard	Not available.
Mixture versus substance information	Not available.
Other information	Not available.

## Section 12: Ecological information

### 12.1. Toxicity

Not expected to be harmful to aquatic organisms. Avoid discharge into drains, water courses or onto the ground.

Components	Species	Test results
Rosin (8050-09-7)		
<b>Aquatic Crustacea</b>	EC50 Water flea ( <i>Daphnia magna</i> )	911 mg/l, 48 hours
<b>Fish</b>	LC50 Fathead minnow ( <i>Pimephales promelas</i> )	> 1000 mg/l, 96 hours

### 12.2. Persistence and degradability

No data is available on the degradability of this product.

### 12.3. Bioaccumulative potential

Not available.

### Partition coefficient n-octanol/water (log Kow)

Not available.

### Bioconcentration factor (BCF)

Not available.

### 12.4. Mobility in soil

Not available.

### 12.5. Results of PBT and vPvB assessment

Not a PBT or vPvB substance or mixture.

### 12.6. Other adverse effects

Not available.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

Residual waste

Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

## Section 14: Transport information

### ADR

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

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## IMDG

Not regulated as dangerous goods.

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Not regulated.

#### Other EU regulations

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

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Rosin (CAS 8050-09-7)

**Directive 94/33/EC on the protection of young people at work**

Rosin (CAS 8050-09-7)

## Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.

## National regulations

Not available.

## 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## Section 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

Not available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R43 May cause sensitisation by skin contact.

Revision information

H317 - May cause an allergic skin reaction.

Training information

Physical & Chemical Properties: Multiple Properties

Disclaimer

Not available.

The information in the sheet was written based on the best knowledge and experience currently available.

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