



## Safety Data Sheet according to (EC) No 1907/2006 - ISO 11014-1

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60EN 362 5C

SDS no. : 175666

V001.3

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### 1. Identification of the substance/preparation and of the company/undertaking

**Trade name:**

60EN 362 5C

**Intended use:**

Solder Wire

**Company name:**

Henkel Limited  
Technologies House  
Wood Lane End  
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Great Britain

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**Emergency information:**

24 Hours Emergency Tel: +44 (0)20 8312 0291

### 2. Hazards identification

Fumes evolved at soldering temperatures will irritate the nose, throat and lungs. Prolonged or repeated exposure to flux fumes may result in sensitisation in sensitive workers.

### 3. Composition / information on ingredients

**Declaration of ingredients according to EC/1907/2006:**

Hazardous components CAS-No.	EINECS ELINCS	content	Classification
Tin 7440-31-5	231-141-8	50 - 60 %	
Lead 7439-92-1	231-100-4	30 - 40 %	
Rosin 8050-09-7	232-475-7	1 - 5 %	Xi - Irritant; R43

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

Substances without classification may have community workplace exposure limits available.

### 4. First aid measures

**Inhalation:**

Move to fresh air. If symptoms persist, seek medical advice.

**Skin contact:**

Rinse with running water and soap.

**Eye contact:**

Flush eyes with plenty of water for at least 5 minutes. If irritation persists seek medical attention.

**Ingestion:**

Do not induce vomiting.  
Seek medical advice.

## 5. Fire fighting measures

**Combustion behaviour:**

The product itself does not burn. Any fire extinguishing action should be appropriate to the surroundings.

**Suitable extinguishing media:**

carbon dioxide, foam, powder

**Extinguishing media which must not be used for safety reasons:**

Do not use water on fires where molten metal is present.

**Special protection equipment for firefighters:**

Wear self-contained breathing apparatus.

**Hazardous combustion products:**

High temperatures may produce heavy metal dust, fumes or vapours.  
The flux medium will give rise to irritating fumes.

## 6. Accidental release measures

**Personal precautions:**

Wear protective equipment.

**Environmental precautions:**

Do not let product enter drains.

**Clean-up methods:**

Scrape up spilled material and place in a closed container for disposal.

## 7. Handling and storage

**Handling:**

Use only in well-ventilated areas.  
When using do not eat, drink or smoke.  
Wash hands before breaks and immediately after handling the product.  
Avoid skin and eye contact.

**Storage:**

Store in a cool, dry place.

## 8. Exposure controls / personal protection

### Components with specific control parameters for workplace:

Valid for

Great Britain

Basis

UK EH40 WELs

Ingredient	ppm	mg/m <sup>3</sup>	Type	Category	Remarks
TIN (INORGANIC COMPOUNDS AS SN) 7440-31-5		2	Time Weighted Average (TWA).		EU-2000/39/EC
Lead 7439-92-1		0,15	Time Weighted Average (TWA).		EH40 WEL
INORGANIC LEAD AND ITS COMPOUNDS 7439-92-1		0,15	Time Weighted Average (TWA).		EU_OEL
LEAD AND ITS IONIC COMPOUNDS 7439-92-1				Listed.	EU_OEL_II
LEAD AND ITS IONIC COMPOUNDS 7439-92-1			Biological Limit Value:		EU_OEL_II
ROSIN-BASED SOLDER FLUX FUME 8050-09-7		0,05	Time Weighted Average (TWA).		EH40 WEL
ROSIN-BASED SOLDER FLUX FUME 8050-09-7		0,15	Short Term Exposure Limit (STEL):		EH40 WEL

Colophony (Rosin) and derivatives: Rosin-based flux fume as total resin acids.

### Engineering controls:

Ensure adequate ventilation, especially in confined areas.

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

### Hand protection:

The use of chemical resistant gloves such as Nitrile are recommended

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

### Eye protection:

Wear protective glasses.

## 9. Physical and chemical properties

### General characteristics:

Appearance solid

Odor: grey  
none

### Phys./chem. properties:

pH-value not applicable  
Boiling point Not determined  
Flash point not applicable  
Density 8,5 g/cm<sup>3</sup>  
( )  
Solubility (qualitative) insoluble  
Melting point 183,0 - 188,0 °C (361.4 - 370.4 °F)  
Octanol/Water distribution coefficient Not applicable  
VOC content < 5,0 %

## 10. Stability and reactivity

**Conditions to avoid:**

Stable under recommended storage conditions.

**Materials to avoid:**

Solder alloy will react with concentrated nitric acid to produce toxic fumes of nitrogen oxides.  
Reacts with strong oxidants.

**Hazardous decomposition products:**

Thermal decomposition can lead to release of irritating gases and vapors.

## 11. Toxicological information

**Oral toxicity:**

Harmful if swallowed.

**Inhalative toxicity:**

Fumes evolved at soldering temperatures will irritate the nose, throat and lungs. Prolonged or repeated exposure to flux fumes may result in sensitisation in sensitive workers.

**Dermal toxicity:**

May cause sensitization by skin contact.

**Skin irritation:**

Fumes emitted during soldering may irritate the skin.

**Eye irritation:**

Fumes emitted during soldering may irritate the eyes.

## 12. Ecological information

**Ecotoxicity:**

Do not empty into drains / surface water / ground water.

**Mobility:**

The product is insoluble and sinks in water.

**Bioaccumulative potential:**

Octanol/Water distribution coefficient: Not applicable

**General ecological information:**

The product is not biodegradable.

## 13. Disposal considerations

**Product disposal:**

Wherever possible unwanted solder alloy should be recycled for recovery of metal.  
Otherwise dispose of in accordance with local and national regulations.

**Waste code(EWC):**

16 03 03 - inorganic wastes containing dangerous substances

**Disposal of uncleaned packages:**

Dispose of as unused product.

## 14. Transport information

**General information:**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

## 15. Regulations - classification and identification

### Indication of danger:

none

### Risk phrases:

not applicable

### Safety phrases:

not applicable

### Additional information:

Contains lead which may harm your health. Lead can cause birth defects and other reproductive harm. Regulations forbid the use of lead solder in any private or public drinking water supply system. Avoid breathing fumes given out during soldering. Flux fumes may irritate the nose, throat and lungs and may after prolonged/repeated exposure give an allergic reaction (asthma). After handling solder wash hands with soap and water before eating, drinking or smoking. Keep out of reach of children.

### National regulations/information (Great Britain):

#### Remarks

The Health & Safety at Work Act 1974.  
The Control of Lead at Work Regulations. L132:Control of Lead at Work: Approved Code of Practice and Guidance.  
The Control of Substances Hazardous to Health Regulations. L5:General Approved Code of Practice to the COSHH Regulations. HS(G)97:A Step by Step Guide to the COSHH Regulations. HS(G)193: COSHH essentials: Easy steps to control chemicals.  
IND (G)248L:Solder fume and you. IND(G)249L:Controlling health risks from rosin (colophony) based solder fluxes.  
Employees should be under medical surveillance if the risk assessment made under the Control of Lead at Work Regulations indicates they are likely to be exposed to significant concentrations of lead, or if an Employment Medical Advisor or appointed doctor so certifies.  
A woman employed on work which exposes her to lead should notify her employer as soon as possible if she becomes pregnant. The Employment Medical Advisor / Appointed Doctor should be informed of the pregnancy.  
Under the Management of Health and Safety at Work Regulations, employers are required to assess the particular risks to health at work of pregnant workers and workers who have recently given birth or who are breast feeding.

## 16. Other information

The labelling of the product is indicated in Section 15. The full text of the R-phrases indicated by codes in this safety data sheet are as follows:

R43 May cause sensitization by skin contact.

### **Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.