



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

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SAV1 362 5C

SDS no. : 221857

V001.3

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

**Trade name:**

SAV1 362 5C

**Intended use:**

Solder Wire

**Company name:**

Henkel Limited  
Technologies House  
Wood Lane End  
HP2 4RQ Hemel Hempstead  
  
Great Britain

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**E-mail address of person responsible for Safety Data Sheet:**

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**Emergency information:**

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

### 2. Hazards identification

Flux fumes emitted during reflow will irritate the nose and throat and may cause an asthmatic type reaction.

### 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	40 - 50 %	
Lead 7439-92-1	231-100-4	40 - 50 %	
Rosin 8050-09-7	232-475-7	1 - 5 %	Xi - Irritant; R43
Copper 7440-50-8	231-159-6	1 - 5 %	R52/53 Xn - Harmful; R22 Xi - Irritant; R36/37/38

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.  
Obtain medical attention if irritation persists.

**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  
fine water spray

**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:**

Avoid contact with skin and eyes.

**Environmental precautions:**

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

**Clean-up methods:**

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

## 7. Handling and storage

**Handling:**

Extraction is necessary to remove fumes evolved during reflow.  
When using do not eat, drink or smoke.  
Wash hands before breaks and immediately after handling the product.

**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
COPPER, FUME 7440-50-8		0,2	Time Weighted Average (TWA).		EH40 WEL
COPPER, INHALABLE DUSTS AND MISTS (AS CU) 7440-50-8		1	Time Weighted Average (TWA).		EH40 WEL
COPPER, INHALABLE DUSTS AND MISTS (AS CU) 7440-50-8		2	Short Term Exposure Limit (STEL):		EH40 WEL

### Engineering controls:

Extraction is necessary to remove fumes evolved during reflow.

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

Flash point: Not applicable

Vapor pressure: not applicable

Density: 8,9000 g/cm<sup>3</sup>

( )

Solubility (qualitative): insoluble

Melting point: 183,0 °C (361.4 °F)

Octanol/Water distribution coefficient  
VOC content

Not applicable  
< 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.

**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:**

This product is considered to have low dermal toxicity.

**Skin irritation:**

Fumes emitted during soldering may irritate the skin.

**Eye irritation:**

Fumes emitted during soldering may irritate the eyes.

## 12. Ecological information

**Mobility:**

The product is insoluble and sinks in water.

**Persistence and Biodegradability:**

The product is not biodegradable.

**Bioaccumulative potential:**

Octanol/Water distribution coefficient: Not applicable

**General ecological information:**

Not available

## 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 ):**

06 04 05 - wastes containing other heavy metals

**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

### Contains

Rosin

### 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 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.  
The Control of Lead at Work Regulations. L132:Control of Lead at Work: Approved Code of Practice and Guidance.  
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.

## 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:

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R43 May cause sensitization by skin contact.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### **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.