

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

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SDS no.: 180283

V001.2 Revision: 16.10.2007

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

Trade name:

96SCLF318AGS88.5

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Intended use:

Solder Paste

Company name:

Henkel KGaA Henkelstr. 67

40191 Düsseldorf

Germany

Phone: +49 (211) 797-0

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

ua-productsafety.uk@uk.henkel.com

**Emergency information:** 

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

# 2. Hazards identification

R43 May cause sensitization by skin contact.

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<br>CAS-No. | EINECS<br>ELINCS | content    | Classification  |
|---------------------------------|------------------|------------|---|
| Tin<br>7440-31-5                | 231-141-8        | 80 - 100 % |   |
| Silver<br>7440-22-4             | 231-131-3        | 1 - 5 %    |   |
| Copper<br>7440-50-8             | 231-159-6        | 0,1 - 1 %  | R52/53<br>Xn - Harmful; R22<br>Xi - Irritant; R36/37/38 |
| Rosin<br>8050-09-7              | 232-475-7        | 1 - 5 %    | Xi - Irritant; R43                                      |
| Modified rosin<br>144413-22-9   |                  | 1 - 5 %    | R53   |

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

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#### **Inhalation:**

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

### Skin contact:

Rinse with running water and soap.

Seek medical advice.

### Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Seek medical advice.

## **Ingestion:**

Do not induce vomiting.

Seek medical advice.

# 5. Fire fighting measures

#### Suitable extinguishing media:

carbon dioxide, foam, powder

# 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 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.

Avoid skin and eye contact.

When using do not eat, drink or smoke.

Wash hands before breaks and immediately after handling the product.

# Storage:

Store in a cool place in closed original container.

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# 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> | Туре                                 | Category | Remarks       |
|---|-----|-------------------|--------------------------------------|----------|---------------|
| TIN (INORGANIC COMPOUNDS AS SN) 7440-31-5 |     | 2                 | Time Weighted Average (TWA).         |          | EU-2000/39/EC |
| SILVER, METALLIC<br>7440-22-4             |     | 0,1               | Time Weighted Average (TWA).         |          | EU-2000/39/EC |
|   |     | 0,1               | Time Weighted Average (TWA).         |          | EH40 WEL      |
| COPPER, FUME<br>7440-50-8                 |     | 0,2               | Time Weighted Average (TWA).         |          | EH40 WEL      |
|   |     | 1                 | Time Weighted Average (TWA).         |          | EH40 WEL      |
|   |     | 2                 | Short Term Exposure<br>Limit (STEL): |          | EH40 WEL      |
| ROSIN-BASED SOLDER FLUX FUME<br>8050-09-7 |     | 0,05              | Time Weighted Average (TWA).         |          | EH40 WEL      |
|   |     | 0,15              | Short Term Exposure<br>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.

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 paste grey
Odor: mild

# Phys./chem. properties:

 $\begin{array}{ccc} \text{pH-value} & \text{not applicable} \\ \text{Boiling point} & 256 \, ^{\circ}\text{C} \, (492.8 \, ^{\circ}\text{F}) \\ \text{Flash point} & 117 \, ^{\circ}\text{C} \, (242.6 \, ^{\circ}\text{F}) \\ \text{Vapor pressure} & \text{Not available} \\ \text{Density} & 4,29 \, \text{g/cm3} \end{array}$ 

(25 °C (77 °F))
Solubility (qualitative) partially miscible

(Solvent: Water)

Melting point Solder alloy
Melting point 217 °C (422.6 °F)
Octanol/Water distribution coefficient Not determined

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VOC content < 5 %

# 10. Stability and reactivity

#### Conditions to avoid:

Stable under normal conditions of storage and use.

#### Materials to avoid:

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

### 11. Toxicological information

## Oral toxicity:

Swallowing may cause irritation of mouth, throat and digestive tract, diarrhoea and vomiting

### 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:

Prolonged or repeated contact may cause skin irritation.

## Eye irritation:

Prolonged or repeated contact may cause eye irritation. Fumes emitted during soldering may irritate the eyes.

### Sensitizing:

May cause sensitization by skin contact.

# 12. Ecological information

# Persistence and Biodegradability:

The product is not biodegradable.

### **Bioaccumulative potential:**

Octanol/Water distribution coefficient: Not determined

### **General ecological information:**

Harmful to aquatic organisms.

## 13. Disposal considerations

#### Product disposal:

Wherever possible unwanted solder pastes should be recycled for recovery of metal.

Otherwise dispose of in accordance with local and national regulations.

Incineration under controlled conditions is recommended.

## 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.

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# 15. Regulations - classification and identification

### Indication of danger:

#### Xi - Irritant



#### **Contains**

Rosin

#### Risk phrases:

R43 May cause sensitization by skin contact.

#### **Safety phrases:**

S24 Avoid contact with skin.

S37 Wear suitable gloves.

#### Additional information:

When heated fumes may cause sensitisation by inhalation.

Warning - this preparation contains a substance not yet tested completely.

### 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.

## 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.

R53 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 it's subsequent amendments, and Commission Directive 1999/45/EC.