



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

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SN62WS200AGS88.5V AAU 500g Jar

SDS no. : 351131

V001.0

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

**Trade name:**

SN62WS200AGS88.5V AAU 500g Jar

**Intended use:**

Solder Paste

**Company name:**

Henkel AG & Co. 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

R20/22 Also harmful by inhalation and if swallowed.

R33 Danger of cumulative effects.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

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

This product contains modified rosin.

### 3. Composition / information on ingredients

**Declaration of ingredients according to (EC) No 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 %	Toxic for reproduction - category 1.; T - Toxic; R61 Toxic for reproduction - category 3.; Xn - Harmful; R62 Xn - Harmful; R20/22 R33
Silver 7440-22-4	231-131-3	1 - 5 %	
2-(2-Butoxyethoxy)ethanol 112-34-5	203-961-6	1 - 5 %	Xi - Irritant; R36
1,2,5,6,9,10-Hexabromocyclodecane 3194-55-6	221-695-9	0,1 - 1 %	

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:**

Immediately wash skin thoroughly with soap and water.  
Obtain medical attention if irritation persists.

**Eye contact:**

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:**

Do not induce vomiting.  
Seek medical advice.

#### 5. Fire fighting measures

**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 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 original container at temperatures 5-10°C.

## 8. Exposure controls / personal protection

### Components with specific control parameters for workplace:

Valid for

Great Britain

Basis

UK EH40 WELs

Ingredient	ppm	mg/m3	Type	Category	Remarks
TIN (INORGANIC COMPOUNDS AS SN) 7440-31-5				Listed.	EU-2000/39/EC
TIN (INORGANIC COMPOUNDS AS SN) 7440-31-5		2	Time Weighted Average (TWA).		EU-2000/39/EC
INORGANIC LEAD AND ITS COMPOUNDS 7439-92-1				Listed.	EU_OEL
LEAD AND ITS IONIC COMPOUNDS 7439-92-1			Biological Limit Value:		EU_OEL_II
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 LEAD COMPOUNDS, OTHER THAN LEAD ALKYLs (AS PB) 7439-92-1		0,15	Time Weighted Average (TWA).		EH40 WEL
LEAD AND LEAD COMPOUNDS, OTHER THAN LEAD ALKYLs (AS PB) 7439-92-1				Listed.	EH40 WEL
SILVER (METALLIC) 7440-22-4		0,1	Time Weighted Average (TWA).		EH40 WEL
SILVER, METALLIC 7440-22-4		0,1	Time Weighted Average (TWA).		EU-2000/39/EC
2-(2-BUTOXYETHOXY)ETHANOL 112-34-5	10	67,5	Time Weighted Average (TWA).		EH40 WEL
2-(2-BUTOXYETHOXY)ETHANOL 112-34-5	15	101,2	Short Term Exposure Limit (STEL):		EH40 WEL
2-(2-BUTOXYETHOXY)ETHANOL 112-34-5	15	101,2	Short Term Exposure Limit (STEL):		EU-2000/39/EC
2-(2-BUTOXYETHOXY)ETHANOL 112-34-5	10	67,5	Time Weighted Average (TWA).		EU-2000/39/EC

### Engineering controls:

Ensure adequate ventilation, especially in confined areas.

Extraction is necessary to remove fumes evolved during reflow.

### Respiratory protection:

Use only in well-ventilated areas.

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
Odor:	Grey Mild

**Phys./chem. properties:**

pH-value	not applicable
Boiling point	Not determined
Flash point	> 60 °C (> 140 °F)
Density	4,96 g/cm <sup>3</sup>
( )	
Solubility (qualitative)	Insoluble
Melting point	179 °C (354.2 °F)
Octanol/Water distribution coefficient	Not determined
Vapor density:	Heavier than air
VOC content	< 5,0 %

## 10. Stability and reactivity

**Conditions to avoid:**

Stable under recommended storage conditions.  
Solder alloy will react with concentrated nitric acid to produce toxic fumes of nitrogen oxides.

**Materials to avoid:**

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

**Inhalative toxicity:**

Harmful by inhalation.  
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.

**Skin irritation:**

Prolonged or repeated contact may cause skin irritation.

**Eye irritation:**

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

**Other remarks:**

Chronic overexposure to lead may result in damage to the blood forming, nervous, urinary and reproductive systems. Severe lead toxicity will cause sterility, abortion and neonatal mortality and morbidity.

## 12. Ecological information

**Ecotoxicity:**

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

**Mobility:**

The product is insoluble and sinks in water.

**Persistence and Biodegradability:**

The product is not biodegradable.

**Bioaccumulative potential:**

Octanol/Water distribution coefficient: Not determined

### 13. Disposal considerations

**Product disposal:**

Wherever possible unwanted solder pastes should be recycled for recovery of metal.  
Dispose of as hazardous waste in compliance 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:**

T - Toxic



**Contains**

Lead

**Risk phrases:**

R61 May cause harm to the unborn child.  
R20/22 Also harmful by inhalation and if swallowed.  
R33 Danger of cumulative effects.  
R62 Possible risk of impaired fertility.

**Safety phrases:**

S53 Avoid exposure - obtain special instructions before use.  
S35 This material and its container must be disposed of in a safe way.  
S36/37 Wear suitable protective clothing and gloves.

**Additional information:**

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).  
Contains lead which may harm your health. Lead can cause birth defects and other reproductive harm.  
Do not heat above 500 °C  
After handling solder wash hands with soap and water before eating, drinking or smoking.  
Keep out of reach of children.

**Additional labeling:**

Restricted to professional users.

**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.  
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:

- R20/22 Harmful by inhalation and if swallowed.
- R33 Danger of cumulative effects.
- R36 Irritating to eyes.
- R61 May cause harm to the unborn child.
- R62 Possible risk of impaired fertility.

**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.