



## Safety Data Sheet according to Regulation (EC) No 1907/2006

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LOCTITE DA 100 92ADAP85V 13K known as  
92ADA100DAP85V KAU 30g EFD

SDS No. : 359690  
V005.0

Revision: 14.11.2019

printing date: 16.07.2020

Replaces version from: 12.05.2014

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

#### 1.1. Product identifier

LOCTITE DA 100 92ADAP85V 13K known as 92ADA100DAP85V KAU 30g EFD

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

Intended use:

Solder Paste

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

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000

Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

#### 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (CLP):

|| The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

#### 2.2. Label elements

##### Label elements (CLP):

|| The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

##### Supplemental information

Contains: Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine **May produce an allergic reaction.**  
Safety data sheet available on request.

### 2.3. Other hazards

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.

This product contains modified rosin.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Declaration of the ingredients according to CLP (EC) No 1272/2008:

| Hazardous components<br>CAS-No.                                                          | EC Number<br>REACH-Reg No.    | content    | Classification                                                           |
|------------------------------------------------------------------------------------------|-------------------------------|------------|--------------------------------------------------------------------------|
| Tin<br>7440-31-5                                                                         | 231-141-8<br>01-2119486474-28 | 50- 100 %  |                                                                          |
| Alcohols, C12-15, ethoxylated<br>propoxylated<br>68551-13-3                              |                               | 1- < 5 %   | Skin Irrit. 2<br>H315<br>Eye Irrit. 2<br>H319<br>Aquatic Acute 1<br>H400 |
| Octadecanoic acid, 12-hydroxy-, reaction<br>products with ethylenediamine<br>100545-48-0 | 309-629-8<br>01-2119979085-27 | 0,1- < 1 % | Skin Sens. 1B<br>H317<br>Aquatic Chronic 4<br>H413                       |

For full text of the H - statements and other abbreviations see section 16 "Other information".  
Substances without classification may have community workplace exposure limits available.

## SECTION 4: First aid measures

### 4.1. Description of 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:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

## SECTION 5: Firefighting measures

### **5.1. Extinguishing media**

#### **Suitable extinguishing media:**

Fine water spray  
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.

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

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

### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus.

#### **Additional information:**

In case of fire, keep containers cool with water spray.

## **SECTION 6: Accidental release measures**

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

Avoid contact with skin and eyes.  
Ensure adequate ventilation.  
Wear protective equipment.

### **6.2. Environmental precautions**

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

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

Scrape up spilled material and place in a closed container for disposal.  
Dispose of contaminated material as waste according to Section 13.

### **6.4. Reference to other sections**

See advice in section 8

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe 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.  
Avoid breathing fumes given out during soldering.  
See advice in section 8

#### **Hygiene measures:**

Good industrial hygiene practices should be observed.  
After handling solder wash hands with soap and water before eating, drinking or smoking.  
Do not eat, drink or smoke while working.

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

Refer to Technical Data Sheet

### **7.3. Specific end use(s)**

Solder Paste

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational Exposure Limits**

Valid for  
Great Britain

| Ingredient [Regulated substance]                                         | ppm | mg/m <sup>3</sup> | Value type                   | Short term exposure limit category / Remarks | Regulatory list |
|--------------------------------------------------------------------------|-----|-------------------|------------------------------|----------------------------------------------|-----------------|
| Antimony<br>7440-36-0<br>[ANTIMONY AND COMPOUNDS EXCEPT STIBINE (AS SB)] |     | 0,5               | Time Weighted Average (TWA): |                                              | EH40 WEL        |

**Occupational Exposure Limits**

Valid for  
Ireland

| Ingredient [Regulated substance]                        | ppm | mg/m <sup>3</sup> | Value type                   | Short term exposure limit category / Remarks | Regulatory list |
|---------------------------------------------------------|-----|-------------------|------------------------------|----------------------------------------------|-----------------|
| Tin<br>7440-31-5<br>[TIN, METAL (AS SN)]                |     | 2                 | Time Weighted Average (TWA): | Indicative OELV                              | IR_OEL          |
| Tin<br>7440-31-5<br>[TIN (INORGANIC COMPOUNDS AS SN)]   |     | 2                 | Time Weighted Average (TWA): | Indicative                                   | ECTLV           |
| Antimony<br>7440-36-0<br>[ANTIMONY & COMPOUNDS (AS SB)] |     | 0,5               | Time Weighted Average (TWA): |                                              | IR_OEL          |

**Predicted No-Effect Concentration (PNEC):**

| Name on list     | Environmental Compartment    | Exposure period | Value |     |       |        | Remarks |
|------------------|------------------------------|-----------------|-------|-----|-------|--------|---------|
|                  |                              |                 | mg/l  | ppm | mg/kg | others |         |
| Tin<br>7440-31-5 | aqua (freshwater)            |                 |       |     |       |        |         |
| Tin<br>7440-31-5 | aqua (marine water)          |                 |       |     |       |        |         |
| Tin<br>7440-31-5 | sewage treatment plant (STP) |                 |       |     |       |        |         |
| Tin<br>7440-31-5 | sediment (freshwater)        |                 |       |     |       |        |         |
| Tin<br>7440-31-5 | sediment (marine water)      |                 |       |     |       |        |         |
| Tin<br>7440-31-5 | Air                          |                 |       |     |       |        |         |
| Tin<br>7440-31-5 | Soil                         |                 |       |     |       |        |         |
| Tin<br>7440-31-5 | Predator                     |                 |       |     |       |        |         |

**Derived No-Effect Level (DNEL):**

| Name on list                                                                          | Application Area   | Route of Exposure | Health Effect                         | Exposure Time | Value                  | Remarks |
|---------------------------------------------------------------------------------------|--------------------|-------------------|---------------------------------------|---------------|------------------------|---------|
| Tin<br>7440-31-5                                                                      | General population | dermal            | Long term exposure - systemic effects |               | 80 mg/kg               |         |
| Tin<br>7440-31-5                                                                      | Workers            | inhalation        | Long term exposure - systemic effects |               | 71 mg/m <sup>3</sup>   |         |
| Tin<br>7440-31-5                                                                      | Workers            | dermal            | Long term exposure - systemic effects |               | 10 mg/kg               |         |
| Tin<br>7440-31-5                                                                      | General population | inhalation        | Long term exposure - systemic effects |               | 17 mg/m <sup>3</sup>   |         |
| Tin<br>7440-31-5                                                                      | General population | oral              | Long term exposure - systemic effects |               | 5 mg/kg                |         |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine<br>100545-48-0 | Workers            | inhalation        | Long term exposure - local effects    |               | 3,53 mg/m <sup>3</sup> |         |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine<br>100545-48-0 | General population | inhalation        | Long term exposure - local effects    |               | 0,83 mg/m <sup>3</sup> |         |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

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.

Suitable respiratory protection:

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq$  0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq$  0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

## SECTION 9: Physical and chemical properties

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

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Appearance                             | paste                              |
|                                        | grey                               |
| Odor                                   | mild                               |
| Odour threshold                        | No data available / Not applicable |
| pH                                     | Not applicable                     |
| Melting point                          | Not determined                     |
| Solidification temperature             | No data available / Not applicable |
| Initial boiling point                  | Not determined                     |
| Flash point                            | 120 °C (248 °F)                    |
| Evaporation rate                       | No data available / Not applicable |
| Flammability                           | No data available / Not applicable |
| Explosive limits                       | No data available / Not applicable |
| Vapour pressure                        | Not determined                     |
| Relative vapour density:               | Heavier than air                   |
| Density                                | Not determined                     |
| Bulk density                           | No data available / Not applicable |
| Solubility                             | No data available / Not applicable |
| Solubility (qualitative)               | Insoluble                          |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Auto-ignition temperature              | No data available / Not applicable |
| Decomposition temperature              | No data available / Not applicable |
| Viscosity                              | No data available / Not applicable |
| Viscosity (kinematic)                  | No data available / Not applicable |
| Explosive properties                   | No data available / Not applicable |
| Oxidising properties                   | No data available / Not applicable |

### 9.2. Other information

No data available / Not applicable

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Solder alloy will react with concentrated nitric acid to produce toxic fumes of nitrogen oxides.  
Keep away from strong oxidizing agents, strong Lewis or mineral acids.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

### 10.4. Conditions to avoid

No decomposition if used according to specifications.

### 10.5. Incompatible materials

See section reactivity.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### General toxicological information:

Prolonged or repeated contact may cause skin irritation.  
Prolonged or repeated contact may cause eye irritation.

### 11.1. Information on toxicological effects

#### Acute oral toxicity:

May cause irritation to the digestive tract.

| Hazardous substances<br>CAS-No.                                                                 | Value<br>type | Value         | Species | Method                                   |
|-------------------------------------------------------------------------------------------------|---------------|---------------|---------|------------------------------------------|
| Tin<br>7440-31-5                                                                                | LD50          | > 2.000 mg/kg | rat     | OECD Guideline 423 (Acute Oral toxicity) |
| Alcohols, C12-15,<br>ethoxylated propoxylated<br>68551-13-3                                     | LD50          | > 2.000 mg/kg | rat     | not specified                            |
| Octadecanoic acid, 12-<br>hydroxy-, reaction<br>products with<br>ethylenediamine<br>100545-48-0 | LD0           | > 2.000 mg/kg | rat     | OECD Guideline 423 (Acute Oral toxicity) |
| Octadecanoic acid, 12-<br>hydroxy-, reaction<br>products with<br>ethylenediamine<br>100545-48-0 | LD50          | > 2.000 mg/kg | rat     | OECD Guideline 423 (Acute Oral toxicity) |

#### Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No. | Value<br>type | Value         | Species | Method                                     |
|---------------------------------|---------------|---------------|---------|--------------------------------------------|
| Tin<br>7440-31-5                | LD50          | > 2.000 mg/kg | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |

#### Acute 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.

| Hazardous substances<br>CAS-No.                                                                 | Value<br>type | Value       | Test atmosphere | Exposure<br>time | Species | Method                                                                         |
|-------------------------------------------------------------------------------------------------|---------------|-------------|-----------------|------------------|---------|--------------------------------------------------------------------------------|
| Octadecanoic acid, 12-<br>hydroxy-, reaction<br>products with<br>ethylenediamine<br>100545-48-0 | LC0           | > 5,05 mg/l | dust            | 4 h              | rat     | OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method) |

#### Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No. | Result         | Exposure<br>time | Species | Method                                                   |
|---------------------------------|----------------|------------------|---------|----------------------------------------------------------|
| Tin<br>7440-31-5                | not irritating |                  | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

**Serious eye damage/irritation:**

Solder pastes may be abrasive to the eyes and the fumes are irritating.

| Hazardous substances<br>CAS-No.                                                                 | Result         | Exposure<br>time | Species | Method                                                |
|-------------------------------------------------------------------------------------------------|----------------|------------------|---------|-------------------------------------------------------|
| Tin<br>7440-31-5                                                                                | not irritating |                  | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| Octadecanoic acid, 12-<br>hydroxy-, reaction<br>products with<br>ethylenediamine<br>100545-48-0 | not irritating |                  | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

**Respiratory or skin sensitization:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                                                 | Result      | Test type                       | Species    | Method                                  |
|-------------------------------------------------------------------------------------------------|-------------|---------------------------------|------------|-----------------------------------------|
| Octadecanoic acid, 12-<br>hydroxy-, reaction<br>products with<br>ethylenediamine<br>100545-48-0 | Sensitizing | Guinea pig maximisation<br>test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |

**Germ cell mutagenicity:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No. | Result   | Type of study /<br>Route of<br>administration          | Metabolic<br>activation /<br>Exposure time | Species | Method                                                                   |
|---------------------------------|----------|--------------------------------------------------------|--------------------------------------------|---------|--------------------------------------------------------------------------|
| Tin<br>7440-31-5                | negative | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                           |         | OECD Guideline 471<br>(Bacterial Reverse Mutation<br>Assay)              |
| Tin<br>7440-31-5                | negative | in vitro mammalian<br>chromosome<br>aberration test    | with and without                           |         | OECD Guideline 473 (In vitro<br>Mammalian Chromosome<br>Aberration Test) |
| Tin<br>7440-31-5                | negative | mammalian cell<br>gene mutation assay                  | with and without                           |         | OECD Guideline 476 (In vitro<br>Mammalian Cell Gene<br>Mutation Test)    |

**Carcinogenicity**

No data available.

**Reproductive toxicity:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No. | Result / Value        | Test type | Route of<br>application | Species | Method                                                                             |
|---------------------------------|-----------------------|-----------|-------------------------|---------|------------------------------------------------------------------------------------|
| Tin<br>7440-31-5                | NOAEL P > 1.000 mg/kg |           | oral: gavage            | rat     | OECD Guideline 421<br>(Reproduction /<br>Developmental Toxicity<br>Screening Test) |

**STOT-single exposure:**

No data available.



**STOT-repeated exposure::**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances CAS-No. | Result / Value      | Route of application | Exposure time / Frequency of treatment | Species | Method                                                                |
|------------------------------|---------------------|----------------------|----------------------------------------|---------|-----------------------------------------------------------------------|
| Tin<br>7440-31-5             | NOAEL > 1.000 mg/kg | oral: gavage         | 28 days<br>daily                       | rat     | OECD Guideline 407<br>(Repeated Dose 28-Day Oral Toxicity in Rodents) |

**Aspiration hazard:**

No data available.

**SECTION 12: Ecological information**

**General ecological information:**

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

**12.1. Toxicity**

**Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.                                                          | Value type | Value    | Exposure time | Species             | Method                                         |
|---------------------------------------------------------------------------------------|------------|----------|---------------|---------------------|------------------------------------------------|
| Tin<br>7440-31-5                                                                      | LC50       |          | 96 h          | Pimephales promelas | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Alcohols, C12-15, ethoxylated propoxylated<br>68551-13-3                              | LC50       | 1,1 mg/l | 96 h          | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine<br>100545-48-0 | LL50       |          | 96 h          | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |

**Toxicity (Daphnia):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.                                                          | Value type | Value     | Exposure time | Species       | Method                                                     |
|---------------------------------------------------------------------------------------|------------|-----------|---------------|---------------|------------------------------------------------------------|
| Alcohols, C12-15, ethoxylated propoxylated<br>68551-13-3                              | EC50       | 0,55 mg/l | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine<br>100545-48-0 | EL50       |           | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |

**Chronic toxicity to aquatic invertebrates**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species            | Method           |
|------------------------------|------------|-------|---------------|--------------------|------------------|
| Tin<br>7440-31-5             | NOEC       |       | 7 d           | Ceriodaphnia dubia | other guideline: |

**Toxicity (Algae):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.                                                          | Value type | Value | Exposure time | Species                         | Method                                            |
|---------------------------------------------------------------------------------------|------------|-------|---------------|---------------------------------|---------------------------------------------------|
| Tin<br>7440-31-5                                                                      | EC50       |       | 72 h          | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Tin<br>7440-31-5                                                                      | NOEC       |       | 72 h          | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine<br>100545-48-0 | EL50       |       | 72 h          | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |

#### Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.                             | Value type | Value        | Exposure time | Species                                             | Method                                                             |
|----------------------------------------------------------|------------|--------------|---------------|-----------------------------------------------------|--------------------------------------------------------------------|
| Tin<br>7440-31-5                                         | EC50       |              | 3 h           | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Alcohols, C12-15, ethoxylated propoxylated<br>68551-13-3 | EC50       | > 1.000 mg/l | 6 h           | Pseudomonas putida                                  | other guideline:                                                   |

#### 12.2. Persistence and degradability

The product is not biodegradable.

| Hazardous substances CAS-No.                                                          | Result                     | Test type | Degradability | Exposure time | Method                                                                      |
|---------------------------------------------------------------------------------------|----------------------------|-----------|---------------|---------------|-----------------------------------------------------------------------------|
| Alcohols, C12-15, ethoxylated propoxylated<br>68551-13-3                              | readily biodegradable      | aerobic   | > 60 %        | 28 d          | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine<br>100545-48-0 | not readily biodegradable. | aerobic   | 22 %          | 28 day        | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)           |

#### 12.3. Bioaccumulative potential

No data available.

#### 12.4. Mobility in soil

The product is insoluble and sinks in water.

| Hazardous substances CAS-No.                                                          | LogPow | Temperature | Method                                                                      |
|---------------------------------------------------------------------------------------|--------|-------------|-----------------------------------------------------------------------------|
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine<br>100545-48-0 | > 5,86 |             | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |

#### 12.5. Results of PBT and vPvB assessment

| Hazardous substances CAS-No. | PBT / vPvB                                                                                                            |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Tin<br>7440-31-5             | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

#### 12.6. Other adverse effects

No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Product disposal:**

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

**Disposal of uncleaned packages:**

Dispose of as unused product.

**Waste code**

06 04 05 - wastes containing other heavy metals

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

## SECTION 14: Transport information

**14.1. UN number**

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

**14.2. UN proper shipping name**

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

**14.3. Transport hazard class(es)**

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

**14.4. Packing group**

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

**14.5. Environmental hazards**

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

**14.6. Special precautions for user**

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

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

## SECTION 15: Regulatory information

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

VOC content < 5,00 %  
(2010/75/EC)

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

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

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remarks | <p>The Health &amp; Safety at Work Act 1974.<br/>The Control of Substances Hazardous to Health Regulations. L5:General<br/>Approved Code of Practice to the COSHH Regulations. HS(G)97:A Step by Step<br/>Guide to the COSHH Regulations. HS(G)193: COSHH essentials: Easy steps to<br/>control chemicals.<br/>IND (G)248L:Solder fume and you. IND(G)249L:Controlling health risks from<br/>rosin (colophony) based solder fluxes.<br/>Under the Management of Health and Safety at Work Regulations, employers are<br/>required to assess the particular risks to health at work of pregnant workers and<br/>workers who have recently given birth or who are breast feeding.</p> |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H400 Very toxic to aquatic life.
- H413 May cause long lasting harmful effects to aquatic life.

### Further information:

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Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your\_company.com).

**Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.**