

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

### 1.1. Product identifier

99C C502 5C 0.7MM 0.5KG FN

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

Intended use: - Heavy duty

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

Premier Farnell  
150 Armley Road  
Leeds LS12 2QQ  
Tel. : +44 (0) 870 129 8608

### 1.4. Emergency telephone number

+44 (0) 870 202530

## 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).

### 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.

### 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% |                |

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:

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

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

Flux fumes may irritate the nose, throat and lungs and may after prolonged/repeated exposure give an allergic reaction (asthma).

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

See section: Description of first aid measures

## SECTION 5: Firefighting measures

### Combustion behaviour:

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

#### 5.1. Extinguishing media

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.

## SECTION 6: Accidental release measures

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

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.

#### 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 skin and eye contact.

See advice in section 8

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## Hygiene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

After handling solder wash hands with soap and water before eating, drinking or smoking.

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

Ensure good ventilation/extraction.

Store in a cool, dry place.

## 7.3. Specific end use(s)

Solder Wire

## 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 |
|---|-----|-------------------|------------------------------|--|-----------------|
| Tin<br>7440-31-5<br>[TIN (INORGANIC COMPOUNDS AS SN)] |     | 2                 | Time Weighted Average (TWA): | Indicative                                   | ECTLV           |

Derived No-Effect Level (DNEL):

| Name on list     | Application Area   | Route of Exposure | Health Effect                                | Exposure Time | Value                   | Remarks |
|------------------|--------------------|-------------------|--|---------------|-------------------------|---------|
| Tin<br>7440-31-5 | Workers            | Dermal            | Acute/short term exposure - systemic effects |               | 133,3 mg/kg             |         |
| Tin<br>7440-31-5 |                    | Inhalation        |  |               | 11,75 mg/m <sup>3</sup> |         |
| Tin<br>7440-31-5 |                    | Dermal            | Long term exposure - systemic effects        |               | 133,3 mg/kg             |         |
| Tin<br>7440-31-5 |                    | Inhalation        |  |               | 11,75 mg/m <sup>3</sup> |         |
| Tin<br>7440-31-5 | General population | Dermal            | Acute/short term exposure - systemic effects |               | 80 mg/kg                |         |
| Tin<br>7440-31-5 |                    | Inhalation        |  |               | 3,476 mg/m <sup>3</sup> |         |
| Tin<br>7440-31-5 |                    | oral              |  |               | 80 mg/kg                |         |
| Tin<br>7440-31-5 |                    | Dermal            | Long term exposure - systemic effects        |               | 80 mg/kg                |         |
| Tin<br>7440-31-5 |                    | Inhalation        |  |               | 3,476 mg/m <sup>3</sup> |         |
| Tin<br>7440-31-5 |                    | oral              |  |               | 80 mg/kg                |         |

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:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter.

This recommendation should be matched to local conditions.

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.

Skin protection:

Wear suitable protective clothing.

## SECTION 9: Physical and chemical properties

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

|   |                                      |
|---|--------------------------------------|
| Appearance                                | : solid grey                         |
| Odor                                      | : None                               |
| Odour threshold                           | : No data available / Not applicable |
| pH  | : Not applicable                     |
| Initial boiling point                     | : No data available / Not applicable |
| Flash point                               | : Not available.                     |
| Decomposition temperature                 | : No data available / Not applicable |
| Vapour pressure                           | : Not applicable                     |
| Density [25 °C (77 °F)]                   | : 7,3 g/cm <sup>3</sup>              |
| Bulk density                              | : 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 |
| Solubility (qualitative) (Solvent: Water) | : Insoluble                          |
| Solidification temperature                | : No data available / Not applicable |

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|  |                                      |
|--|--------------------------------------|
| Melting point                          | : 227°C (440.6°F)                    |
| Flammability                           | : No data available / Not applicable |
| Auto-ignition temperature              | : No data available / Not applicable |
| Explosive limits                       | : No data available / Not applicable |
| Partition coefficient: n-octanol/water | : Not applicable                     |
| Evaporation rate                       | : No data available / Not applicable |
| Vapor density                          | : Heavier than air                   |
| 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.

### 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 stored and applied as directed.

### 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

### 11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:

This material is considered to have low toxicity 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.

## Acute oral toxicity:

| Hazardous components<br>CAS-No. | Value<br>type | Value | Route of<br>application | Exposure<br>time | Species | Method |
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|

## Acute inhalative toxicity:

| Hazardous components<br>CAS-No. | Value<br>type | Value | Route of<br>application | Exposure<br>time | Species | Method |
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|

## Acute dermal toxicity:

| Hazardous components<br>CAS-No. | Value<br>type | Value | Route of<br>application | Exposure<br>time | Species | Method |
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|

## SECTION 12: Ecological information

### General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

#### 12.1. Toxicity

Ecotoxicity:

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

#### 12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

#### 12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

The product is insoluble and sinks in water.

Bioaccumulative potential:

No data available.

Bioaccumulative potential:

Octanol/Water distribution coefficient: Not applicable

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

No data available.

#### 12.6. Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product disposal:

Wherever possible unwanted solder alloy 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. Packaging 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 73/78 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 (2010/75/EC) : <5,0 %

### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

## SECTION 16: Other information

### 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.

### Part Number Table

| Description   | Part Number |
|---|-------------|
| Solder Wire, Lead Free, 0.7mm Diameter, 227°C, 500g | 509-0726    |

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