



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

Trade name: CR 88	Solder Paste „CR 88“ F-SW 32 DIN EN 29 454.1 1.1.3.C
<p>1.) <u>IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING</u></p> <p>1.1.) Product identifier Trade name/designation:</p> <p>1.2.) Relevant identified uses of the substance or mixture and uses advised against</p> <p>Relevant identified uses:</p> <p>Sector of uses [SU]:</p> <p>Product Categories [PC]:</p> <p>Article categories [AC]:</p> <p>Uses advised against:</p> <p>Sector of uses [SU]:</p> <p>1.3.) Details of the supplier of the safety data sheet</p> <p>Supplier (manufacturer/importer/only representative/downstream user/distributor):</p> <p>address:</p> <p>Emergency telephone number:</p>	<p>Solder Paste: CR88</p> <p>SU 3 Industrial uses: Uses of substances as such or in preparations at industrial sites</p> <p>SU 16 Manufacture of computer, electronic and optical products, electrical equipment</p> <p>SU17 General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment</p> <p>PC38 Welding and soldering products (with flux coatings or flux cores), flux products</p> <p>PC38 Welding and soldering products (with flux coatings or flux cores), flux products</p> <p>AC 1 Vehicles</p> <p>AC 2 Machinery, mechanical appliances, electrical/electronic articles</p> <p>AC 9 Photographic and reprographic articles: cameras, video cameras</p> <p>SU 21 Consumer uses: Private households (= general public = consumers)</p> <p>EDSYN GMBH EUROPA Finkenweg 2 D 97892 Kreuzwertheim</p> <p>Tel.: 09342- 6413 Fax: 09342 -6417</p> <p>next hospital</p>



2.) HAZARDS IDENTIFICATION

2.1.) Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	

2.2.) Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



GHS07

Exclamation mark

Signal word: Warning

Hazard statements for health hazards

H317 May cause an allergic skin reaction.

Supplemental Hazard information (EU):

EUH208 Contains flux based on resin. May produce an allergic reaction.

Precautionary statements Prevention

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response

P302+P352 IF ON SKIN: Wash with plenty of water/...

Other hazards

No data available

3.) COMPOSITION/INFORMATION ON INGREDIENTS

3.1.) Mixtures

Description:

Tin-solder for soft-soldering



Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS-No. 7440-31-5 EC No. 231-141-8 REACH-No. 01-2119486474-28-0004	tin	80 – 84 Wt %
CAS-No. 8050-26-8	Flux based on resin Skin Sens. 1 Warning H317	13 – 18 Wt %
CAS-No. 7440-22-4 EC No. 231-131-3 REACH-No. 01-2119555669-21-0025	silver	1 - 3 Wt %

Full text of H- and EUH-phrases: see section 16.

4.) FIRST AID MEASURES

4.1.) Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion:

Rinse mouth. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

Self-protection of the first aider:

Use personal protection equipment.

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

Allergic reactions.

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

Treat symptomatically.

5.) FIREFIGHTING MEASURES

5.1.) Extinguishing media

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

5.2.) Special hazard arising from the substance or mixtures

The product itself does not burn.



<p>Hazardous combustion products:</p> <p>5.3.) Advice for firefighters</p> <p>5.4.) Additional information</p>	<p>In case of fire: gases/vapours, toxic</p> <p>Wear a self-contained breathing apparatus and chemical protective clothing.</p> <p>Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.</p>
<p>6.) <u>ACCIDENTAL RELEASE MEASURES</u></p> <p>6.1.) Personal precautions, protective equipment and emergency procedures</p> <p>6.1.1.) For non-emergency personnel</p> <p>Personal precautions:</p> <p>Protective equipment:</p> <p>6.1.2.) For emergency responders</p> <p>Personal protection equipment:</p> <p>6.2.) Environmental precautions</p> <p>6.3.) Methods and material for containment and cleaning up</p> <p>For containment:</p> <p>For cleaning up:</p> <p>6.4.) Reference to other sections</p> <p>6.5.) Additional information</p>	<p>Remove persons to safety.</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Personal protection equipment: see section 8</p> <p>Do not allow to enter into surface water or drains.</p> <p>Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).</p> <p>Take up mechanically, placing in appropriate containers for disposal. Wipe up with absorbent material (eg: cloth, fleece).</p> <p>Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13</p> <p>Use appropriate container to avoid environmental contamination.</p>
<p>7.) <u>HANDLING AND STORAGE</u></p> <p>7.1.) Precautions for safe handling</p> <p>Protective measures</p> <p>Advices on safe handling:</p> <p>Fire prevent measures:</p> <p>Advices on general occupational hygiene</p>	<p>Wear personal protection equipment (refer to section 8). All work processes must always be designed so that the following is as low as possible: Inhalation Eye contact No special measures are necessary.</p> <p>No special measures are necessary. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.</p> <p>When using do not eat, drink or smoke. Avoid contact with eyes and skin.</p>



<p>7.2.) Conditions for safe storage, including any incompatibilities</p> <p>Technical measures and storage conditions:</p> <p>Requirements for storage rooms and vessels:</p> <p>7.3.) Specific end use(s)</p> <p>Recommendation:</p> <p>Industrial sector specific solutions:</p>	<p>Keep container tightly closed in a cool, well-ventilated place.</p> <p>Keep/Store only in original container.</p> <p>Processing for soldering Observe technical data sheet.</p> <p>Tin-solder for soft-soldering</p>															
<p>8.) <u>EXPOSURE CONTROLS/PERSONAL PROTECTION</u></p> <p>8.1.) Control parameters</p> <p>8.1.1.) Occupational exposure limit values</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Limit value type (country of origin)</th> <th style="text-align: left;">Substance name</th> <th style="text-align: left;">1. long-term occupational exposure limit value 2. short-term occupational exposure limit value 3. Instantaneous value 4. Monitoring and observation processes 5. Remark</th> </tr> </thead> <tbody> <tr> <td>IOELV (EU)</td> <td>tin CAS-No. 7440-31-5</td> <td>1. 2 mg/m³</td> </tr> <tr> <td>WEL (GB)</td> <td>tin CAS-No. 7440-31-5</td> <td>1. 2 mg/m³ 2. 4 mg/m³</td> </tr> <tr> <td>IOELV (EU)</td> <td>silver CAS-No. 7440-22-4</td> <td>1. 0,1 mg/m³ 5. metal</td> </tr> <tr> <td>WEL (GB)</td> <td>silver CAS-No. 7440-22-4</td> <td>1. 0,1 mg/m³ 5. metal</td> </tr> </tbody> </table> <p>8.1.2.) Biological limit values</p> <p>8.1.3.) DNEL-/PNEC-values</p> <p>8.2.) Exposure controls</p> <p>8.2.1.) Appropriate engineering controls</p> <p>8.2.2.) Personal protection equipment</p> <p>Eye/face protection:</p> <p>Skin protection:</p> <p>Respiratory protection:</p>	Limit value type (country of origin)	Substance name	1. long-term occupational exposure limit value 2. short-term occupational exposure limit value 3. Instantaneous value 4. Monitoring and observation processes 5. Remark	IOELV (EU)	tin CAS-No. 7440-31-5	1. 2 mg/m ³	WEL (GB)	tin CAS-No. 7440-31-5	1. 2 mg/m ³ 2. 4 mg/m ³	IOELV (EU)	silver CAS-No. 7440-22-4	1. 0,1 mg/m ³ 5. metal	WEL (GB)	silver CAS-No. 7440-22-4	1. 0,1 mg/m ³ 5. metal	<p>No data available</p> <p>No data available.</p> <p>No special measures required.</p> <p>Eye glasses with side protection</p> <p>Tested protective gloves must be worn DIN EN 374 Suitable material: Breakthrough time (maximum wearing time) min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.</p> <p>If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.</p>
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<p>8.2.3.) Environmental exposure controls</p> <p>8.3.) Additional information</p>	<p>See section 7. No additional measures necessary.</p> <p>No data available</p>																																																																																										
<p>9.) <u>PHYSICAL AND CHEMICAL PROPERTIES</u></p> <p>9.1.) Information on basic physical and chemical properties</p> <p>Appearance Physical state: Colour: Odour:</p> <p>Safety relevant basis data</p> <table border="1"> <thead> <tr> <th><u>parameter</u></th> <th></th> <th>at °C</th> <th>Method</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>pH:</td> <td>4 – 6</td> <td>20 °C</td> <td></td> <td>Value for flux</td> </tr> <tr> <td>Melting point/freezing point:</td> <td>221 °C</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Freezing point:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Initial boiling point and boiling range:</td> <td>not applicable</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Decomposition temperature (°C):</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Flash point :</td> <td>not applicable</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Evaporation rate:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Ignition temperature in °C:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Upper/lower flammability or explosive limits:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Vapour pressure:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Vapour density:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Density:</td> <td>4 – 8 g/cm³</td> <td>20 °C</td> <td></td> <td></td> </tr> <tr> <td>Bulk density:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Water solubility (g/L):</td> <td>not applicable</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Partition coefficient: n-octanol/water:</td> <td>not determined</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dynamic viscosity:</td> <td>400 – 1000 mPa*s</td> <td>25 °C</td> <td>Brookfield-Helipath</td> <td></td> </tr> <tr> <td>Kinematic viscosity:</td> <td>Not determined</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>9.2.) Other information</p>	<u>parameter</u>		at °C	Method	Remark	pH:	4 – 6	20 °C		Value for flux	Melting point/freezing point:	221 °C				Freezing point:	not determined				Initial boiling point and boiling range:	not applicable				Decomposition temperature (°C):	not determined				Flash point :	not applicable				Evaporation rate:	not determined				Ignition temperature in °C:	not determined				Upper/lower flammability or explosive limits:	not determined				Vapour pressure:	not determined				Vapour density:	not determined				Density:	4 – 8 g/cm ³	20 °C			Bulk density:	not determined				Water solubility (g/L):	not applicable				Partition coefficient: n-octanol/water:	not determined				Dynamic viscosity:	400 – 1000 mPa*s	25 °C	Brookfield-Helipath		Kinematic viscosity:	Not determined				<p>liquid grey earthy</p>
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<p>10.) <u>STABILITY AND REACTIVITY</u></p> <p>10.1.) Reactivity</p> <p>10.2.) Chemical stability</p> <p>10.3.) Possibility of hazardous reactions</p> <p>10.4.) Conditions to avoid</p> <p>10.5.) Incompatible materials</p> <p>10.6.) Hazardous decomposition products</p>	<p>Risk of explosion if heated under confinement. The product itself does not burn.</p> <p>The product is chemically stable under recommended conditions of storage, use and temperature.</p> <p>No hazardous reaction when handled and stored according to provisions.</p> <p>No data available</p> <p>No data available</p> <p>In case of fire: Gases/vapours, toxic</p>																																																																																										



<p>11.) <u>TOXICOLOGICAL INFORMATION</u></p> <p>11.1.) Information on toxicological effects</p> <p>Respiratory or skin sensitisation:</p>	<p>May cause allergy or asthma symptoms or breathing difficulties if inhaled. Contains epoxy constituents. May produce an allergic reaction.</p>						
<p>12.) <u>ECOLOGICAL INFORMATION</u></p> <p>12.1.) Toxicity</p> <p>12.2.) Persistence and degradability</p> <p>12.3.) Bioaccumulative potential</p> <p>12.4.) Mobility in soil</p> <p>12.5.) Results of PBT and vPvB assessment</p> <table border="1" data-bbox="263 952 1444 1012"> <thead> <tr> <th>CAS-No.</th> <th>Substance name</th> <th>Results of PBT and vPvB assessment</th> </tr> </thead> <tbody> <tr> <td>8050-26-8</td> <td>Flux based on resin</td> <td>-</td> </tr> </tbody> </table> <p>12.6.) Other adverse effects</p>	CAS-No.	Substance name	Results of PBT and vPvB assessment	8050-26-8	Flux based on resin	-	<p>No data available</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>No data available</p>
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<p>13.) <u>DISPOSAL CONSIDERATIONS</u></p> <p>13.1.) Waste treatment methods</p> <p>13.1.1.) Product/Packaging disposal</p> <p>Waste code product:</p> <p>Waste code packaging:</p> <p>Waste treatment options</p> <p>Appropriate disposal / Product:</p> <p>Appropriate disposal / Package:</p> <p>13.2.) Additional information</p>	<p>Consult supplier about waste disposal. Return to manufacturer.</p> <p>Waste codes/waste designations according to EWC/AVV.</p> <p>12 01 04 non-ferrous metal dust and particles</p> <p>15 01 02 Plastic packaging</p> <p>Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.</p> <p>Completely emptied packages can be recycled.</p> <p>No data available</p>						
<p>14.) <u>TRANSPORT INFORMATION</u></p> <p>14.1.) UN-No.</p> <p>14.2.) UN proper shipping name</p> <p>14.3.) Transport hazard class(es)</p> <p>14.4.) Packing group</p>	<p>No dangerous good in sense of these transport regulations.</p> <p>not relevant.</p> <p>not relevant.</p> <p>not relevant.</p> <p>not relevant.</p>						



<p>14.5.) Environmental hazards</p> <p>14.6.) Special precautions for user</p> <p>14.7.) Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</p>	<p>not relevant.</p> <p>not relevant.</p> <p>not relevant</p>						
<p>15.) REGULATORY INFORMATION</p> <p>15.1.) Safety; health and environmental regulations/legislation specific for the substance or mixture</p> <p>15.2.) Chemical Safety Assessment</p> <p>15.3.) Additional information</p>	<p>No data available</p> <p>No data available</p> <p>No data available</p>						
<p>16.) OTHER INFORMATION</p> <p>16.1.) Indication of changes</p> <p>16.2.) Abbreviations and acronyms</p> <p>16.3.) Key literature references and sources for data</p> <p>16.4.) Classification for mixtures and used evaluation method according to regulation (EC) No. 1272/2008 [CLP]</p> <p>Classification according to Regulation (EC) No. 1272/2008 [CLP]:</p> <table border="1" data-bbox="264 1386 1442 1500"> <thead> <tr> <th>Hazard classes and hazard categories</th> <th>Hazard statements</th> <th>Classification procedure</th> </tr> </thead> <tbody> <tr> <td>Respiratory or skin sensitisation (Skin Sens.1)</td> <td>H317: May cause an allergic skin reaction.</td> <td></td> </tr> </tbody> </table>	Hazard classes and hazard categories	Hazard statements	Classification procedure	Respiratory or skin sensitisation (Skin Sens.1)	H317: May cause an allergic skin reaction.		<p>No data available</p> <p>No data available</p> <p>No data available</p>
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<p>16.5.) Relevant R-, H- and EUH-phrases (Number and full text)</p> <p>Hazard statements</p> <p>16.6.) Training advice</p> <p>16.7.) Additional information</p> <p>Revision date:</p>	<p>H317 May cause an allergic skin reaction.</p> <p>No data available</p> <p>The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing. The information on this safety data sheet is not necessarily valid for the new made-up material.</p> <p>21.10.2015 / 04.11.2015 / 15.03.2016 / 17.03.2016</p>						