



14.02.2013

**Material Safety Data Sheet - according to directive 91/155/EWG**

**INTERNATIONAL STANDARD NORM ISO 11014-1**

Trade Name: CR 88	Solder wire S-Sn99 Cu1 F-SW 32 NF EN 29 454.1 1.1.3
1.) <b><u>Manufacturer:</u></b> <b><u>Address:</u></b>	EDSYN GMBH EUROPA Finkenweg 2 D 97892 Kreuzwertheim Tel.: 09342 - 6413 Fax: 09342 - 6417
2.) <b><u>COMPOSITION / DATA OF COMPONENTS</u></b>  2.1 Description:  2.2 Singular composition:   2.3 Hazardous ingredients:	Solder pastes are a mixture of metal powder alloy with a flux based on resin with activators and thixotropic agents.  <b>Alloys:                      CAS-No.                      Concentration                      R Phrases:</b>  Sn                                      7440-31-5                      90 - 97 %/weight Cu                                      7440-50-8                      0 - 1 %/weight Ag                                      7440-22-4                      0 - 5 %/weight Resin                                      8050-90-7                      1 - 3,5 %/weight Terpenes                                      9855-5                      6 - 9 %/weight Thixotropic agent                                      2,5 - 4 %/weight  None
3.) <b><u>POSSIBLE DANGERS</u></b>  3.1 Safety risks: 3.2 Environment: 3.3 Notice:	None Weakly water hazarding, as containing Cu. At processing under normal conditions and under surveillance of general hygienic rules no harm is caused by the product.
4.) <b><u>FIRST AID MEASURES</u></b>  4.1 After inhalation of solder fumes: 4.2 After contact with skin: 4.3 If swallowed: 4.4 After contact with eyes:	Bring to fresh air. Wash away with warm water and soap. Consult a doctor. Wash out with much water for at least 15 minutes, consult a doctor.
5.) <b><u>MEASURES OF FIRE-FIGHTING:</u></b>  5.1 Adequate extinguishing material: 5.2 Inadequate extinguishing material: 5.3 Safety risks: 5.4 Special safety equipment:	Foam, powder, CO <sub>2</sub> . Water None At bigger fires respiration protection is recommended.
6.) <b><u>MEASURES AT LEAKING OUT</u></b>  6.1 Personal protection:	No special measures required.



<p><b>6.2 Environmental measures:</b> <b>6.3 Procedures for cleaning:</b></p>	<p>Avoid getting into water or drinking water. Remove and dispose mechanical with spatula, cloth etc..</p>
<p>7.) <b><u>HANDLING AND STORAGE</u></b></p> <p><b>7.1 Handling</b> <b>7.1.1 Measures for safety handling:</b> <b>7.1.2 Personal protective equipment:</b> <b>7.1.3 Using advices:</b></p> <p><b>7.2 Storage:</b> <b>7.2.1 Conditions of storage:</b></p>	<p>Avoid leaking into canalization, inshore waters or earth. Avoid contact with eyes, skin and clothes as well as inhalation of fumes. At use of flame soldering flux can catch fire.</p> <p>Store cool and dry in closed original containers. No storage together with food.</p>
<p>8.) <b><u>EXPOSITION AND PERSONAL SAFETY EQUIPMENT</u></b></p> <p><b>8.1 Occupational exposure standards:</b> <b>8.2 Personal protective equipment:</b></p> <p><b>8.3 Personal protection:</b> <b>Inhalation protection:</b> <b>Hand protection:</b> <b>Eye protection:</b> <b>Body protection:</b></p>	<p>Of principle a sufficient ventilation is foreseen at all soldering works. Components with working place specific to be controlled limits are not existing.</p> <p>Not necessary Gloves (Rubber, Latex) Safety glasses Not necessary</p>
<p>9.) <b><u>PHYSICAL AND CHEMICAL PROPERTIES</u></b></p> <p><b>Form:</b> <b>Colour:</b> <b>Odour:</b></p> <p><b>Melting point/range:</b> <b>Boiling point/range:</b> <b>Flaming point/range:</b> <b>Flammability:</b> <b>Explosion danger:</b> <b>Steam pressure:</b> <b>Density:</b> <b>Solubility in water:</b> <b>pH value:</b> <b>Viscosity:</b> <b>Solvent separation test:</b> <b>Solvent content:</b></p>	<p>pasty metallic grey specific, very weak</p> <p>Resin &gt; 80 °C, Metal &gt; 217 - 221 °C n.a. n.a. flammable with flame n.a. n.a. n.a. &gt;3 n.a. (Flux completely) n.a. (Flux 4-6) 400,000 – 1,000,000 cP.s n.a. 4-6%/Gew</p>
<p>10.) <b><u>STABILITY AND REACTIVITY</u></b></p> <p><b>Reactivity:</b> <b>Stability:</b></p>	<p>Dangerous reactions are not known. The product is stable under normal conditions.</p>
<p>11.) <b><u>TOXICOLOGICAL INFORMATION</u></b></p>	<p>Under disadvantageous conditions (Temperature, Oxidation, Acids) heavy metal ions (Lead) can be set free.</p>



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<p><b>12.) <u>ECOLOGICAL INFORMATION</u></b></p> <p><b>Persistence/Degradability:</b></p>	<p>The contents of the solder paste without metal can be decomposed very easy.</p>
<p><b>13.) <u>NOTICE FOR DISPOSAL</u></b></p> <p><b>Waste key number:</b></p>	<p>EAK 120 104          Bigger amounts are to be conducted to recycling.</p>
<p><b>14.) <u>TRANSPORT INFORMATION</u></b></p>	<p>The product is authorized for all ways and means of transport.</p>
<p><b>15.) <u>REGULATORY INFORMATIONS</u></b></p> <p><b>Marking according to EU measures:</b></p> <p><b>R-Sentences:</b></p> <p><b>S-Sentences:</b></p>	<p>R 36/38          Irritating skin and eyes  R 42/43          Sensitization through inhalation and contact with skin</p> <p>S 2                Shall not get into children's hands  S 23                Don't inhale smoke and fumes  S 24/25          Avoid contact with eyes or skin  S 36/37          Wear safety gloves or glasses</p>
<p><b>16.) <u>OTHER INFORMATION</u></b></p>	<p>The relevant data sheet is applicable here.  The information contained here in is based on data considered accurate and is offered at no charge.  Our aim, by providing the above information which reflects the current status of our knowledge and experience is to describe our product in terms of safety requirements.  Liability is expressly disclaimed for loss or injury arising out of use of this information or the use of any materials designated.  Supplementary copies of this data sheet are available on request.</p>