



28. Juli 2005

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

**INTERNATIONAL STANDARD NORM ISO 11014-1**

Trade Name: CR 44	Solder wire S-Sn99 Cu1 DIN EN 29 453	Flux R, RA, RMA NF EN 29 454.1
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>COMPOSITIONS / INFORMATION ON THE COMPONENTS</u></b>  2.1 Description:  2.2 Components:  2.3 Hazardous ingredients:  2.4 Additional notice:	Solder pastes are a mixture of metal powder alloy with a flux based on resin with activators and thixotropic agents.  <b>Alloys:                      Codes                      Concentration      R Phrases:</b>  Sn                              7440-31-5                      51 - 56%/weight Pb                              7439-92-1                      30 - 36%/weight Ag                              7440-22-4                      0 - 2%/weight and: Rosin mixture              8050-90-7                      1 - 3,5%/weight Terpenes mixture        98-55-5                        6 - 9%/weight Thixotropic agent mixture                      2,5 - 4%/weight  The solder paste contents lead in alloy with tin.  Rules and recommendations on use of lead or lead-containing materials have to be minded.	
3.) <b><u>POSSIBLE DANGERS</u></b>  3.1 Safety risks:  3.2 Environment:  3.3 Notice: :	Lead fumes can leak out at temperatures higher than 500°C. Dependent on humanly condition could flux irritates the skin or mucous membranes. Indication "Xi" R-36/38 and 42/43.  Water hazarding, because lead containing.  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 Inhalation:  4.2 Skin:  4.3 If swallowed:  4.4 Eyes:	After inhalation of solder fumes: bring to fresh air.  After contact with skin wash away with warm water and soap.  If swallowed: consult a doctor.  After contact with eyes: wash out with much water for at least 15 minutes, consult a doctor.	
5.) <b><u>FIRE FIGHTING MEASURES</u></b>		



<p><b>5.1 Adequate extinguishing material:</b></p> <p><b>5.2 Inadequate extinguishing material:</b></p> <p><b>5.3 Safety risks:</b></p> <p><b>5.4 Special safety equipment:</b></p>	<p>Foam, powder, CO<sub>2</sub>.</p> <p>Water</p> <p>At Temperature over 500°C lead-fumes can leak out.</p> <p>At bigger fires respiration protection is recommended.</p>
<p><b>6.) <u>MEASURES AT LEAKING OUT</u></b></p> <p><b>6.1 Personal protection:</b></p> <p><b>6.2 Environmental measures:</b></p> <p><b>6.3 Procedures for cleaning:</b></p>	<p>No special measures required.</p> <p>Avoid getting into water or drinking water.</p> <p>Remove and dispose mechanical with spatula, cloth etc. Disposal according to the rules for lead or lead-containing products.</p>
<p><b>7.) <u>HANDLING AND STORAGE</u></b></p> <p><b>7.1 Handling</b></p> <p><b>7.1.1 Measures for safety handling:</b></p> <p><b>7.1.2 Personal protective equipment:</b></p> <p><b>7.1.3 Using advices:</b></p> <p><b>7.2 Storage:</b></p> <p><b>7.2.1 Conditions of storage:</b></p>	<p>Avoid leaking into canalization, inshore waters or earth.</p> <p>Avoid contact with eyes, skin and clothes as well as inhalation of fumes.</p> <p>At use of flame soldering flux can catch fire.</p> <p>Store cool and dry in original containers. No storage together with food.</p>
<p><b>8.) <u>EXPOSITION AND PERSONAL SAFETY EQUIPMENT</u></b></p> <p><b>8.1 Occupational exposure standards:</b></p> <p><b>8.2 Personal protective equipment:</b></p> <p><b>8.3 Personal protection:</b></p> <p><b>Inhalation protection:</b></p> <p><b>Hand protection:</b></p> <p><b>Eye protection:</b></p> <p><b>Body protection:</b></p>	<p>Of principle sufficient ventilation is foreseen at all soldering works.</p> <p>Components with working place specific to be controlled limits are not existing.</p> <p>Not necessary</p> <p>Gloves (Rubber, Latex)</p> <p>Safety glasses</p> <p>Not necessary</p>
<p><b>9.) <u>PHYSICAL AND CHEMICAL PROPERTIES</u></b></p> <p><b>Form:</b></p> <p><b>Colour:</b></p> <p><b>Odour:</b></p> <p><b>Melting point/range:</b></p> <p><b>Boiling point/range:</b></p> <p><b>Flaming point/range:</b></p>	<p>pasty</p> <p>metallic grey</p> <p>specific, very weak</p> <p>Resin &gt; 80°C, Metal &gt; 183°C</p> <p>n.a.</p> <p>n.a.</p>



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<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>	flammable with flame n.a. n.a. >3 n.a. (-Flux completely) n.a. (Flux 4-6) 400,000 – 1,000,000 cP.s n.a. 4-6%/Gew
<b>10.) <u>STABILITY AND REACTIVITY</u></b>  <b>Reactivity:</b>  <b>Stability:</b>	Dangerous reactions are not known.  The product is stable under normal conditions.
<b>11.) <u>TOXICOLOGICAL INFORMATION</u></b>	Under disadvantageous conditions (Temperature, Oxidation, Acids) heavy metal ions (Lead) can be set free.
<b>12.) <u>ECOLOGICAL INFORMATION</u></b>  <b>Persistence/Degradability:</b>	Lead and lead containing products must not get into the environment. The contents of the solder paste without metal can be decomposed very easy.
<b>13.) <u>NOTICE FOR DISPOSAL</u></b>  <b>Product disposal:</b>  <b>Waste key number:</b>	Lead and lead containing products are special waste and have to be disposed according to national and local regulations.  EAK 120 104      Bigger amounts are to be conducted to recycling.
<b>14.) <u>TRANSPORT INFORMATION</u></b>	The product is authorized for all ways and means of transport.
<b>15.) <u>REGULATORY INFORMATIONS</u></b>  <b>Marking according to EU measures:</b> <b>Dangers icon:</b>  <b>R Phrases:</b>  <b>S Phrases:</b>	Xi  R 36/38      Irritating skins and eyes R 42/43      Sensitization through inhalation and contact with skin  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  TRGS 505      Be aware of lead content
<b>16.) <u>OTHER INFORMATION</u></b>	The relevant data sheet is applicable here. The information contained here in is based on data considered accurate and is offered at no charge.

# EDSYN GMBH EUROPA

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	<p>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.</p> <p>Liability is expressly disclaimed for loss or injury arising out of use of this information or the use of any materials designated.</p> <p>Supplementary copies of this data sheet are available on request.</p>
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