



11. Dezember 2013

Material Safety Data Sheet - Regulation 1907/2006/EC

INTERNATIONAL STANDARD NORM ISO 11014-1

Trade name: SS	Solder Wire Sn60Pb 38Cu2 DIN EN 29 453	Flux F-SW32 Typ 1.1.3.B DIN EN 29 454.1																																																										
1.) <u>MANUFACTURER</u> Address:	EDSYN GMBH EUROPA Finkenweg 2 D 97892 Kreuzwertheim Tel. 09342 - 6413 Fax: 09342 - 6417																																																											
2.) <u>HAZARDS IDENTIFICATION</u> Hazard description: Information concerning particular hazards for human and environment: Prevention: GHS label elements:	The product is not classified as dangerous. The product could cause burns during soldering. Its use during soldering may produce or release fumes which can be sensitizing to sensitive workers (no trace of lead in fumes at temperatures below 500 °C). It is recommended to wear safety glasses, protective gloves, to wash hands after use and to work with a good ventilation of area, and suitable fumes extraction system locally installed. None																																																											
3.) <u>COMPOSITION/INFORMATION ON INGREDIENTS</u>	<table border="1" data-bbox="748 1171 1487 1291"> <thead> <tr> <th>Product (metal)</th> <th>Sym bol</th> <th>CAS number</th> <th>EC number</th> <th>R-Sätze</th> <th>S-Sätze</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Tin</td> <td>Sn</td> <td>7440-31-5</td> <td>231-141-8</td> <td>-</td> <td>-</td> <td rowspan="3">See table below</td> </tr> <tr> <td>Copper</td> <td>Cu</td> <td>7440-50-8</td> <td>231-159-6</td> <td>-</td> <td>-</td> </tr> <tr> <td>Lead</td> <td>Pb</td> <td>7439-92-1</td> <td>231-100-4</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p data-bbox="748 1318 932 1360"><u>Alloys composition</u> <u>Sn60Pb38Cu2:</u></p> <table border="1" data-bbox="748 1381 1487 1457"> <thead> <tr> <th>Tin %</th> <th>Lead %</th> <th>Copper %</th> <th>Silver %</th> <th>Bismuth %</th> <th>Antimony %</th> <th>Cadmium %</th> </tr> </thead> <tbody> <tr> <td>60</td> <td>38</td> <td>2</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p data-bbox="748 1482 943 1507"><u>Flux composition:</u></p> <table border="1" data-bbox="748 1535 1487 1675"> <thead> <tr> <th>Produit</th> <th>N°CAS</th> <th>N°EC</th> <th>Phrases R</th> <th>Phrases S</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Modified rosin</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>2,2% (nominal)</td> </tr> <tr> <td>Organic acid</td> <td>124-04-9</td> <td>204-673-3</td> <td>Xi R36</td> <td>S2</td> <td>Other: consult us</td> </tr> </tbody> </table>		Product (metal)	Sym bol	CAS number	EC number	R-Sätze	S-Sätze	%	Tin	Sn	7440-31-5	231-141-8	-	-	See table below	Copper	Cu	7440-50-8	231-159-6	-	-	Lead	Pb	7439-92-1	231-100-4	-	-	Tin %	Lead %	Copper %	Silver %	Bismuth %	Antimony %	Cadmium %	60	38	2	-	-	-	-	Produit	N°CAS	N°EC	Phrases R	Phrases S	%	Modified rosin	-	-	-	-	2,2% (nominal)	Organic acid	124-04-9	204-673-3	Xi R36	S2	Other: consult us
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4.) <u>FIRST AID MEASURES</u> General information:	Take affected persons out into the fresh air. Take affected persons out of danger area and lay down.																																																											



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<p>After inhalation:</p> <p>After skin contact:</p> <p>After eye contact:</p> <p>After swallowing:</p>	<p>Take affected persons into fresh air. If irritation persists, get medical attention.</p> <p>Immediately wash with water and soap and rinse thoroughly. If skin irritation persists, get medical attention. If burns should occur from molten metal, treat for burn and get medical assistance if necessary.</p> <p>Rinse opened eye for several minutes under running water. Get medical attention if irritation occurs.</p> <p>Call for a doctor immediately. Do not induce vomiting unless directed to do so by medical personnel.</p>
<p>5.) <u>FIRE FIGHTING MEASURES</u></p> <p>Non-flammable product</p> <p>Suitable extinguishing agents:</p> <p>Extinguishing agents to avoid:</p> <p>Special hazards caused by the substance, its products of combustion or resulting gases:</p> <p>Protective equipment:</p>	<p>Dry chemical powder, water spray or foam..</p> <p>Do not use water jet on fire where molten metal is present.</p> <p>Molten metal produces fumes or vapours that may be sensitizing to sensitive persons (no Trace of lead in fumes at temperatures below 500 °C). Lead vapours may be given off above 500 °C if the product is in a nearby fire. Molten metal reacts violently with oxidising agents.</p> <p>Wear appropriate self-contained breathing apparatus. Do not inhale combustion gases. Wear full body protective clothing.</p>
<p>6.) <u>ACCIDENTAL RELEASE MEASURES:</u></p> <p>Person-related safety precautions:</p> <p>Measures for environmental protection:</p> <p>Measures for cleaning/collecting:</p> <p>Additional information:</p>	<p>Remove persons from danger area. Wear protective equipment. Keep unprotected persons away. Use respiratory protective device against the effects of fumes/dust. Ensure adequate ventilation.</p> <p>Do not allow to enter sewers/surface or ground water.</p> <p>After cooling, collect the released product and store it in sealed containers.</p> <p>Exposure levels indicated in section 8 are relevant to these and other operations. See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.</p>
<p>7.) <u>HANDLING AND STORAGE</u></p> <p>Handling:</p>	<p>Due to its density, the product is heavy. Avoid the fall of the product. Wear protective shoes. S37 = Wear suitable gloves. Wash hands after handling.</p>



Storage:	On spool, in original cardboard, at room temperature, keep away from inclemency. S2 = Keep out of the reach of children. S13 = Keep away from food, drink and animal feedings stuffs.																						
8.) <u>EXPOSURE CONTROLS/PERSONAL PROTECTION</u>																							
Exposure control:	Permissible air concentration(mg/m3)																						
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Personal protective equipment:	This information is based on the regulatory in force at the time of its elaboration.																						
General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals: do not smoke and eat at work place. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes. Avoid contact with the eyes and skin.																						
Respiratory protection:	Suitable fumes extraction system must be locally installed.																						
Protection of hands:	Cotton gloves are recommended.																						
Eye protection:	Safety glasses are recommended.																						
Body protection:	Protective work clothing is recommended: cotton blouse.																						



<p>9.) <u>PHYSICAL AND CHEMICAL PROPERTIES</u></p> <p>Form: State: Colour: Application:</p>	<p>Wire Solid Silver For soft soldering</p> <table border="1" data-bbox="748 604 1463 678"> <thead> <tr> <th>Properties of alloys</th> <th>T° solidus (°C)</th> <th>T° liquidus (°C)</th> <th>Density (g/cm³)</th> </tr> </thead> <tbody> <tr> <td>Sn62Pb38Cu2</td> <td>183</td> <td>190</td> <td>8,65</td> </tr> </tbody> </table> <table border="1" data-bbox="748 730 1463 825"> <thead> <tr> <th>Properties of fluxes</th> <th>Acid number (mg/g)</th> <th>Chloride content (%)</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>170 to 210</td> <td>< 0,01%</td> </tr> </tbody> </table>	Properties of alloys	T° solidus (°C)	T° liquidus (°C)	Density (g/cm ³)	Sn62Pb38Cu2	183	190	8,65	Properties of fluxes	Acid number (mg/g)	Chloride content (%)	C	170 to 210	< 0,01%
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<p>10.) <u>STABILITY AND REACTIVITY</u></p> <p>Stability: Conditions to avoid: Hazardous decomposition products:</p>	<p>Stable under normal conditions of use and storage. Strong oxidisers may cause violent reaction. No hazardous decomposition under normal conditions use.</p>														
<p>11.) <u>TOXICOLOGICAL INFORMATION</u></p> <p>Eye contact: Skin contact: Inhalation: Acute toxicity:</p>	<p>May cause eye irritation due to the fumes during soldering. May cause skin irritation in case of flux projections or fumes during soldering. It is recommended to wear cotton gloves to prevent burns by projections. Use of product during soldering may produce or release fumes due to heated rosin, which can be sensitizing to sensitive workers (no trace of lead in fumes at temperatures below 500 °C). No adverse health effect is expected under normal conditions of use.</p>														
<p>12.) <u>ECOLOGICAL INFORMATIONS</u></p> <p>General notes:</p>	<p>Do not allow product to reach ground water, water course or sewage system.</p>														
<p>13.) <u>DISPOSAL CONSIDERATIONS</u></p>	<p>Disposal must be made according to official regulations.</p>														
<p>14.) <u>TRANSPORT INFORMATION</u></p> <p>DOT regulations: 14.1) Land transport ADR/RID (cross-border):</p>	<p>Hazard class: - Not regulated. ADR/RID class: -Not regulated.</p>														

EDSYN GMBH EUROPA

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

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14.2) Maritime transport IMDG:	IMDG class: - Not regulated. Marine pollutant: No
14.3) Air transport ICAO-TI and IATA-DGR:	ICAO/IATA class: - Not regulated.
15.) <u>REGULATORY INFORMATION</u>	The product does not require a hazard warning label in accordance with EC directives regulations on dangerous substances.
16.) <u>OTHER INFORMATION</u>	This material safety data sheet is entirely written in accordance with regulations in force.

The information in this Health and Safety Data Sheet is believed to be correct as of the date issued. EDSYN makes no warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. User is responsible for determining whether the EDSYN product is fit for a particular purpose and suitable for users method of use or application.