EDSYN GMBH EUROPA

Zentrum für Löt- und Entlötsysteme

EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

24.06.2015

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

Trade name: CR 77	**SMD-Solder Paste „CR 77“**	**F-SW 32** **DIN EN 29 454.1 1.2.3.C**

1.) IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1.) Product identifier
Trade name/designation: Solder Paste CR77

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

Use of the substance/mixture: Processing for soldering. The product is intended for professional use.

Relevant identified uses:

Sector of uses [SU]

SU 3	Industrial uses: Uses of substances as such or in preparations at industrial sites.
SU 16	Manufacture of computer, electronic and optical products, electrical equipment.
SU 17	General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment.

Product categories [PC]:

PC 38	Welding and soldering products (with flux coatings or flux cores), flux products.
PC 38	Welding and soldering products (with flux coatings or flux cores), flux products.

Article categories [AC]:

AC 1	Vehicles
AC 2	Machinery, mechanical appliances, electrical/electronic articles.
AC 9	Photographic and reprographic articles: cameras, video cameras.

Uses advised against
Sector of uses [SU]:

SU 21	Consumer uses: Private households (= general public = consumers).

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

Supplier (manufacturer/importer/only representative/downstream user/distributor):

EDSYN GMBH EUROPA
Finkenweg 2 Tel.: 09342 - 6413
D 97892 Kreuzwertheim Fax: 09342 - 6417

1.4.) Emergency telephone number

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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.	
Hazardous to the aquatic environment (Aquatic Chronic 2)	H411: Toxic to aquatic life with long lasting effects.	

2.2.) Label elements

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

Hazard pictograms:

GHS07
Exclamation mark

GHS09
Environment

Signal word: Warning

Hazard statements for health hazards:

H317 May cause an allergic skin reaction.

Hazard statements for environmental hazards:

H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard information (EU):

-

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:

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3.) Other hazards:

No data available.

3.) COMPOSITION/INFORMATION ON INGREDIENTS

3.1.) Mixtures

Description:

Tin-solder for soft-soldering.

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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 – 89 Wt-%
CAS No. 8050-26-8	**Flux based on resin** Skin Sens. 1  **Warning** H317	10 – 16 Wt-%
CAS No. 7440-22-4 EC No. 231-131-3 REACH No. 01-2119555669-21-0025	**silver**	0 – 4 Wt-%
CAS No. 7440-50-8 EC No. 231-159-6 REACH No. 01-2119480154-42-0002	**copper** Flam. Sol. 1, Aquatic Acute 1, Aquatic Chronic 1  **Danger** H228-H410	0 – 3 Wt-%

Full text of H- und 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 skin contact:
In case of skin irritation, consult a physician. After contact with skin, wash immediately with plenty of water and soap.

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.

4.2.) Most important symptoms and effects, both acute and delayed
No data available.

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

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5.)	**FIREFIGHTING MEASURES**	
5.1.)	**Extinguishing media**	
	Suitable extinguishing media:	Co-ordinate fire-fighting measures to the fire surroundings. Foam, Extinguishing powder, Carbon dioxide (CO_2),
	Unsuitable extinguishing media:	Water
5.2.)	**Special hazards arising from the substance or mixture**	The product itself does not burn.
	Hazardous combustion products:	In case of fire: Gases/vapours, toxic. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO_2).
5.3.)	**Advice for firefighters**	Wear a self-contained breathing apparatus and chemical protective clothing.
5.4.)	**Additional information**	Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
6.)	**ACCIDENTAL RELEASE MEASURES**	
6.1.)	**Personal precautions, protective equipment and emergency procedures**	
6.1.1.)	**For non-emergency personnel**	
	Personal precautions:	Remove persons to safety.
	Protective equipment:	Wear protective gloves/protective clothing/eye protection/face protection.
6.1.2.)	**For emergency responders**	
	Personal protective equipment:	Personal protection equipment: see section 8.
6.2.)	**Environmental precautions**	Do not allow to enter into surface water or drains.
6.3.)	**Methods and material for containment and cleaning up**	
	For containment:	Wipe up with absorbent material (eg. cloth, fleece).
	For cleaning up:	Take up mechanically, placing in appropriate containers for disposal. Wipe up with absorbent material (e.g. cloth, fleece).
6.4.)	**Reference to other sections**	Safe handling: see section 7. Personal protection equipment: see section 8. Disposal: see section 13.
6.5.)	**Additional information**	Use appropriate container to avoid environmental contamination.

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7.)	**HANDLING AND STORAGE**	
7.1.)	**Precautions for safe handling**	
	Protective measures **Advices on safe handling:**	Wear personal protection equipment (refer to section 8). All work processes must always be designed so that the following is as low as possible: Skin contact, Eye contact. No special measures are necessary. Always close containers tightly after the removal of product. Do not put any product-impregnated cleaning rags into your trouser pockets.
	Fire prevent measures:	No special measures are necessary. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
	Advices on general occupational hygiene:	When using do not eat, drink or smoke. Avoid contact with skin and eyes.
7.2.)	**Conditions for safe storage, including any incompatibilities**	
	Technical measures and storage conditions:	Keep container tightly closed in a cool, well-ventilated place.
	Requirements for storage rooms and vessels:	Keep/Store only in original container.
	Hints on storage assembly:	Do not store together with: Food and feedingstuffs.
7.3.)	**Specific end use(s)**	
	Recommendation:	Processing for soldering. Observe technical data sheet.
	Industrial sector specific solutions:	Tin-solder for soft-soldering.

8.) **EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1.) **Control parameters**

8.1.1.) **Occupational exposure limit values**

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/m³
WEL (GB)	tin CAS No. 7440-31-5	**1.** 2 mg/m³ **2.** 4 mg/m³
IOELV (EU)	silver CAS No. 7440-22-4	**1.** 0,1 mg/m³ **5.** metal
WEL (GB)	silver CAS No. 7440-22-4	**1.** 0,1 mg/m³ **5.** metal

8.1.2.)	**Biological limit values**	No data available.
8.1.3.)	**DNEL-/PNEC-values**	No data available.
8.2.)	**Exposure controls**	
8.2.1.)	**Appropriate engineering controls**	No special measures required.
8.2.2.)	**Personal protection equipment**	
	Eye/face protection:	Eye glasses with side protection.
	Skin protection:	Tested protective gloves must be worn DIN EN 374. **<u>Suitable material:</u>** 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.
	Respiratory protection:	If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
8.2.3.)	**Environmental exposure controls**	See section 7. No additional measures necessary.
8.3.)	**Additional information**	No data available.

9.) **<u>PHYSICAL AND CHEMICAL PROPERTIES</u>**

9.1.) **Information on basic physical and chemical properties**

APPEARANCE

Physical state:	liquid
Colour:	grey
Odour:	earthy

Safety relevant basis data:

<u>parameter</u>		**at °C**	**Method**	**remark**
pH:	4 – 6	20 °C		Value for flux
Melting point / freezing point	217 – 230 **°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 applicable.			
Upper/lower flammability or explosive limits:	not determined.			
Vapour pressure:	Not applicable.			
Vapour density:	Not determined.			
Density:	4 – 8 g/cm³	20 °C		
Bulk density:	not determined.			
Water solubility (g/L):	not applicable.			

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	Partition coefficient: n-octanol/water:	not determined.
	Dynamic viscosity:	400 – 1.000 mPa*s 25 °C Brookfield-Helipath
	Kinematic viscosity:	not determined.
9.2.)	**Other information**	No data available.
10.)	**STABILITY AND REACTIVITY**	
10.1.)	**Reactivity**	Risk of explosion if heated under confinement. The product itself does not burn.
10.2.)	**Chemical stability**	The product is chemically stable under recommended conditions of storage, use and temperature.
10.3.)	**Possibility of hazardous reactions**	No hazardous reaction when handled and stored according to provisions.
10.4.)	**Conditions to avoid**	No data available.
10.5.)	**Incompatible materials**	No data available.
10.6.)	**Hazardous decomposition products**	In case of fire: Gases/vapours, toxic.
11.)	**TOXICOLOGICAL INFORMATION**	
11.1.)	**Information on toxicological effects**	
	Acute oral toxicity:	No toxicity known.
	Acute dermal toxicity:	No toxicity known.
	Acute inhalation toxicity:	No toxicity known.
	Respiratory or skin sensitisation:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. No sensitising effects known.
12.)	**ECOLOGICAL INFORMATION**	
12.1.)	**Toxicity**	

CAS No.	Substance name	Toxicological information
7440-50-8	copper	LC_{50}: 21 mg/l 4 d LC_{50}: 5,36 mg/l 2 d EC_{50}: 0,34 mg/l 2 d EC_{50}: 0,91 mg/l 3 d EC_{50}: 7,2 mg/l 4 d

	Aquatic toxicity:	Very toxic to aquatic life with long lasting effects.
12.2.)	**Persistence and degradability**	No data available.
12.3.)	**Bioaccumulative potential**	No data available.
12.4.)	**Mobility in soil**	No data available.

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12.5.) Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT- and vPvB assessment
7440-31-5	tin	-
8050-26-8	Flux based on resin	-
7440-22-4	silver	-
7440-50-8	copper	-

12.6.) Other adverse effects

No data available.

13.) DISPOSAL CONSIDERATIONS

13.1.) Waste treatment methods

Consult supplier about waste disposal. Return to manufacturer.

13.1.1.) Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV.

Waste code product:

12 01 04
Non-ferrous metal dust and particles.

Waste code packaging:

07 02 13
Waste plastic

Waste treatment options

Appropriate disposal/Product:

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal/Package:

Completely emptied packages can be recycled.

13.2.) Additional information

No data available.

14.) TRANSPORT INFORMATION

14.1.) UN-No.

not relevant.

14.2.) UN proper shipping name

not relevant.

14.3.) Transport hazard class(es)

not relevant.

14.4.) Packing group

not relevant.

14.5.) Environmental hazards

not relevant.

14.6.) Special precautions for user

not relevant.

14.7.) Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant.

15.) REGULATORY INFORMATION

15.1.) Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.

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15.2.)	**Chemical Safety Assessment**	No data available.
15.3.)	**Additional information**	No data available.

16.)	**OTHER INFORMATION**	
16.1.)	**Indication of changes**	No data available.
16.2.)	**Abbreviations and acronyms**	No data available.
16.3.)	**Key literature references and sources for data**	No data available.
16.4.)	**Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]**	

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.	
Hazardous to the aquatic environment (Aquatic Chronic 2)	H411: Toxic to aquatic life with long lasting effects.	

16.5.)	**Relevant R-, H- and EUH-phrases (Number and full text):**	
	Hazard statements:	**H228** Flammable solid. **H317** May cause an allergic skin reaction. **H400** Very toxic to aquatic life. **H410** Very toxic to aquatic life with long lasting effects.
16.6.)	**Training advice**	No data available.
16.7.)	**Additional information**	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 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.
	Revision date:	10.02.2015 / 17.06.2015