Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

27.02.2018

<u>Material Safety Data Sheet - according to Regulation (EC) No. 1907/2006</u> (REACH)

Trade	e Name: CR 44	SMD Sol	der paste CR 44		Flux F-SW 32 NF EN 29 454.1.2.3
4 \	Identification of the	DIN EN 2	. 9 400		NF EN 29 434.1.2.3
1.)	Identification of the substances/mixture and of the company/undertaking				
1.1.)	Product identifier Trade name/designation: Additional information:	Solder Pa		iire registratior	n according to REACH.
1.2.)	substance or mixture and uses advised against				
	Use of the substance/mixture: Relevant identified uses:	Processing	g for soldering. The	product is into	ended for professional use.
	Sector of uses [SU]:	SU 3	Industrial use: Us	ses of substan	ces as such or in preparations
		SU 16	at industrial sites		ronic and optical products,
		SU 17	electrical equipme General manufac other transport ec	turing, e.g. ma	achinery, equipment, vehicles,
	Product Categories [PC]:	PC 38	Welding and sold cores), flux produ		s (with flux coatings or flux
		PC 38	Welding and sold cores), flux produ	lering products	s (with flux coatings or flux
	Article categories [AC]:	AC 1 AC 2	Vehicles Machinery, mech articles	nanical applian	ces, electrical/electronic
		AC 9		d reprographic	articles: cameras, video
	Uses advised against:				
	Sector of uses [SU]:	SU21	Consumer uses: =consumers)	Private housel	holds (=general public
1.3.)	Details of the supplier of the safety data sheet				
	Supplier (manufacturer / importer / only representative / downstream user / distributor):				
	MANUFACTURER Address:	EDSYN G Finkenweg	MBH EUROPA	Tel.: 0934	2 - 6413
		D 97892 Kreuzwertheim Fax: 09342 - 6417		2 - 6417	
1.4.)	Emergency telephone number	closed hos	spital		

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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
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed.	
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	
Acute toxicity (inhalative) (Acute Tox. 4)	H332: Harmful if inhaled.	
Reproductive toxicity (Pepr. 1A)	H360: May damage fertility or the unborn child.	
STOT-repeated exposure (STOT RE 2)	H373: May cause damage to organs through prolonged or repeated exposure.	
Hazardous to aquatic environment (Aquatic Acute 1)	H400: Very toxic to aquatic life.	

2.2.) Label elements

Labelling according to Regulation (EC) 1272/2008 [CLP]

Hazard pictograms:







GHS07 Exclamation mark

GHS08 Health hazard

GHS09 Environment

Signal word: Danger

Hazard statements for health hazards: H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

H332: Harmful if inhaled.

H360: May damage fertility or the unborn child.

H373: May cause damage to organs through prolonged or repeated

exposure

 $\label{prop:lambda} \mbox{\it Hazard statements for environmental}$

hazards:

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements Prevention P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the

workplace.

P281: Use personal protective equipment as required.

Precautionary statements Response P301+P312: IF SWALLOWED: Call a POISON CENTER / doctor/...if

you feel unwell.

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

attention.

2.3.) Other hazards

No data available

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3.) COMPOSITION / INFORMATION ON INGREDIENTS

3.2.) Mixtures

Description: Tin-solder for soft-soldering

Hazardous ingredients / Hazardous ilmpurities / Stabilisers

Product identifiers	Substance name Classification according to Regulation (EC) No. 1272/2008 [CLP]	Concen- tration
CAS-No.: 7439-92-1 EC-No.: 231-100-4 REACH No.: 01-2119513221-59-0000	lead Pepr. 1A, Acute Tox. 4, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1 Danger H302-H332-H360Df-H373-H410	8 - 88 Wt %
CAS-No.: 7440-31-5 EC-No.: 231-141-8 REACH No.: 01-2119486474-28-0004	tin	8 – 63 Wt %
CAS-No.:8050-26-8	Flux based on resin Skin Sens. 1 ••• Warning H317	9 – 16 Wt %
CAS-No.:7440-22-4 EC-No.:231-131-3 REACH No.: 01-2119555669-21-0025	silver	0 – 2 Wt %

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

4.	١	FIDCT	VID	МΕΛ	SURES
4.)	LIKOI	AID	IVICA	SURES

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 danger area. Do not leave affected person unattended. First aider: Pay

attention to self-protection!

Following inhalation: In case of inhalation of decomposition products, affected person should be

moved into fresh air and kept still. In case of irregular breathing or

respiratory arrest provide artificial respiration.

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water. In

case of skin irritation, consult a physician.

After eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water

for 10 to 15 minutes holding eyelids apart. Subsequently consult an

ophthalmologist.

After ingestion: In accidentally swallowed rinse the mouth with plenty of water (only if the

person is conscious) and obtain immediate medical attention. Rinse mouth immediately and drink plenty of water.

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4.2.) Most important symptoms and effects,

both acute and delayed

No known symptoms to date.

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4.3.)	Indication of any immediate medical attention and special treatment needed	Treat symptomatically.
5.1.2.)	FIREFIGHTING MEASURES	
5.1.)	Extinguishing media	
	Suitable extinguishing media:	Carbon dioxide (CO²) Foam, Extinguishing powder
	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 may be liberated: Carbon monoxide, Carbon dioxide (CO²).
5.3.)	Advice for firefighters	Wear a self-contained breathing apparatus and chemical protective clothing.
5.4.)	Additional information	No data available
6.)	ACCIDENTAL RELEASE MEASURES	
6.1.)	Personal precautions, protective equipment and emergency procedures	
6.1.1.	For non-emergency personnel	
	Personal precautions:	Personal precautions Wear personal protection equipment.
	Protective equipment:	Wear protective gloves/protective clothing and eye/face protection.
	Emergency procedures:	Remove all sources of ignition. Provide adequate ventilation.
6.1.2.	For emergency responders	
	Personal protection equipment:	Personal protection equipment: see section 8
6.2.)	Environmental precautions	Environmental precautions. No special environmental measures are necessary. Do not allow to enter into surface water or drains.
6.3.)	Methods and material for containment and cleaning up	
	For containment:	Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acidor universal binding agents).
	For cleaning up:	Methods for cleaning up: Take up mechanically, placing in appropriate containers for disposal. Spilled product must never be returned to the original container for recycling.
6.4.)	Reference to other sections:	Safe handling: see section 7 Disposal: see section 13 Personal protection equipment: see section 8
6.5.)	Additional information:	No data available.

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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). No special technical protective measures are necessary. Only use the material in places where open light, fire and other flammable sources can be kept away.
	Fire prevent measures:	No special fire protection measures are necessary. When using do not eat, drink, smoke, sniff. Keep away from sources of ignition. – No smoking.
	Advices on general occupational hygiene	When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.
7.2.)	Conditions for safe storage, including any incompatibilities	and didties.
	Technical measures and storage conditions:	Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container.
	Requirements for storage rooms and vessels:	Keep/Store only in original container.
	Hints on storage assembly:	Do not store together with: Food and feedingstuffs.
	Further information on storage conditions:	Keep only in the original container in a cool, well-ventilated place.
7.3.)	Specific end use(s)	
	Recommendation:	Observe technical data sheet.
8.)	EXPOSURE CONTROLS / PERSONAL PROTECTION	

8.1.) Control parameters

8.1.1.) Occupational exposure limit values

Limit value type (country of origin)	Substance name	I. long-term occupational exposure limit value short-term occupational exposure limit value Instantaneous value Monitoring and observation processes Remark
BOELV (EU)	lead CAS No.: 7439-92-1	1. 0.15mg/m ³ 5. (inhalable fraction)
IOELV (EU)	tin CAS No.: 7440-31-5	1. 2 mg/m ³
WEL (GB)	tin CAS No.: 7440-31-5	1. 2mg/m³ 2. 4mg/m³
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

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8.1.2.) Biological	limit values
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Limit value type (country of origin)	Substance name	Limit value	parameter Test material Sample time Remark
BLV (EU)	lead CAS-No.: 7439-92-1	30 μg/100ml	 Lead no restriction

8.1.3.) DNEL- / PNEC-values No data available. 8.2.) Exposure controls 8.2.1.) Appropriate engineering controls See section 7. No additional measures necessary. 8.2.2.) Personal protection equipment: Eye / face protection: Eye glasses. Skin protection: Wash hands before breaks and after work. Hand protection: Suitable gloves type: Disposable gloves **Suitable material:** NR (natural rubber, natural latex) NBR (Nitrile rubber) DIN- / EN-Norms: DIN EN 374. Respiratory protection: With correct and proper use, and under normal conditions, breathing protection is not required. Other protection measures: Protective clothing: Body protection: not required. General health and safety measures: When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Avoid contact with skin, eyes and clothes. 8.2.3.) Environmental exposure controls No data available. 8.3.) Additional information No data available. 9.) PHYSICAL AND CHEMICAL **PROPERTIES** 9.1.) Information on basic physical and chemical properties **Appearance** Physical state: Paste Odour: earthy Colour: grey Safety relevant basis data parameter at ℃ Method Remark 20 ℃ Value for flux Melting point/freezing point: 179 - 183°C Freezing point: not determined.

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	Initial boiling point and boiling range:	not determined.		
	Decomposition temperature (℃): Flash point: Evaporation rate: Ignition temperature in ℃:	not determined. not determined. not determined. not determined.		
	Upper/lower flammability or explosive limits: Vapour pressure: Vapour density: Density:	not determined. not determined. not determined. 4 − 8 g/cm³ 20 °C		
	Bulk density: Water solubility (g/l): Partition coefficient: n-octanol/water:	not determined. not determined. not determined.		
	Dynamic viscosity: Kinematic viscosity:	400 − 1000 mPa*s 25 °C nach Brookfield-Helipath not determined.		
9.2.)	Other information	No data available		
10.)	STABILITY AND REACTIVITY			
10.1.)	Reactivity	This information is not available.		
10.2.)	Chemical stability	The mixture 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:	This information is not available.		
10.5.)	Incompatible materials	This information is not available.		
10.6.)	Hazardous decomposition products:	Decomposition takes place from temperatures above: 500 ℃ Thermal decomposition can lead to the escape of irritating gases and vapours.		
11.)	TOXICOLOGICAL INFORMATION			
11.1.)	Information on toxicological effects			
	Acute oral toxicity:	Toxic if swallowed.		
	Acute dermal toxicity:	No data available.		
	Acute inhalation toxicity:	No data available.		
	Skin corrosion / irritation:	Not known.		
	Respiratory or skin sensitisation:	No sensitising effects known. May cause allergy or asthma symptoms or breathing difficulties if inhaled.		
	STOT-repeated exposure:	May cause damage to organs through prolonged or repeated exposure.		

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12. ECOLOGICAL INFORMATION

12.1.) Toxicity

CAS No.	Substance name	Toxicological information
7439-92-1	lead	LC50: 2.8mg/l 4 d
		LC50: 4.46mg/l 2 d

Aquatic toxicity: No toxicity known. Very toxic to aquatic life.

Terrestrial toxicity:

12.2.) Persistence and degradability

12.3.) Bioaccumulative potential

12.4.) Mobility in soil

No data available

No data available

12.5.) Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
7439-92-1	lead	-
7440-31-5	tin	-
8050-26-8	Flux based on resin	-
7440-22-4	silver	-

	7440-22-4	silver		-		
12.6.)	Other adverse effects		No data availab	le.		
13.)	DISPOSAL CONSIDERATIONS					
13.1.)	Waste treatment methods		For recycling, contact manufacturer.			
13.1.1.	3.1.1.) Product / Packaging disposal		Waste codes / v	odes / waste designations according to EWC / AVV		
	Waste code product:			ng other heavy metals disposal must be provided.		
	Waste code packaging:		15 01 10 packaging conta substances	aining residues of or contaminated by dangerous		
	Waste treatment options					
	Appropriate disposal / product:			te according to applicable legislation. Consult the al waste disposal expert about waste disposal.		
	Appropriate disposal / Pacl	kage:	applicable technologisposal manag	ted together with household waste in compliance whical regulations following consultation with approve ement companies and authorities in charge. Comples can be recycled.	ed waste	
13.2.)	Additional information		No data availab	le		

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14.) <u>T</u>	TRANSPORT INFORMATION	No dangerous good in sense of these transport regulations.	
14.1.) L	JN-No.	Not relevant	
14.2.) L	JN proper shipping name	Not relevant	
14.3.) T	Fransport hazard class(es)	Not relevant	
14.4.) F	Packing group	Not relevant	
14.5.) E	Environmental hazards	Not relevant	
14.6.) S	ecial precautions for user Not relevant		
	Transport in bulk according to Annex Il of MARPOL 73/78 and the IBC Code Not relevant		
15.) <u>F</u>	REGULATORY INFORMATION		
r	Safety, health and environmental regulations / legislation specific for the substance or mixture	For this substance a chemical safety assessment is not required.	
15.1.1.)	EU legislation		
Δ	Authorisations:	Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.	
F	Restrictions on use:	When adding solvents to adjust the processing viscosity, strictly follow the instructions of the technical datasheet.	
15.1.2.)	National regulations		
	[GB] National regulations		
	Other regulations, restrictions and prohibition regulations		
v	Water hazard class (WGK):	Slightly hazardous to water (WGK 1).	
15.2.) C	Chemical Safety Assessment	No data available	
15.3.) A	Additional information	No data available	
16.) <u>C</u>	OTHER INFORMATION		
16.1.) lı	ndication of changes	No data available	
16.2.) A	Abbreviations and acronyms	No data available	
	Key literature references and sources or date	No data available	
L		I.	

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16.4.) Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed	-
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	-
Acute toxicity (inhalative) (Acute Tox. 4)	H332: Harmful if inhaled	-
Reproductive toxicity (Repr. 1A)	H360: May damage fertility or the unborn child.	-
STOT-repeated exposure (STOT RE 2)	H373: May cause damage to organs through prolonged or repeated exposure.	-
Hazardous to the aquatic environment (Aquatic Acute 1)	H400: Very toxic to aquatic life.	-

16.5.)	Relevant R-, H- and EUH-phrases
	(Number and full text)

Hazard statements H302 Harmful if swallowed

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled

H360Df May damage the unborn child. Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated

exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

16.6.) Training adviceNo 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 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.

Revision date:: 07.04.2014 / 17.06.2015 / 21.10.2015 / 02.12.2015 / 18.05.2016