Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

27. Oktober 2011

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

INTERNATIONAL STANDARD NORM ISO 11014-1

Trade Name: SA		Solder wire S-Sn96 Ag4 DIN EN 29 453		Flux R RA NF EN 29 454.1	
1.)	<u>Manufacturer:</u> Address:	EDSYN GMBH Finkenweg 2 D 97892 Kreuz		Tel.: 09342 - 6413 Fax: 09342 - 6417	
2.)	COMPOSITIONS / INFORMATION ON THE COMPONENTS				
	2.1 Description:	Solder wire Silver/Tin with incorporated flux Type 1.2.3 B			
	2.2 Components:	Alloys:	Codes	Concentration	R Phrases:
		Tin Silver	7440-31-5 7440-22-4	Rest 3.5% to 4.%	
3.)	HAZARD IDENTIFICATION				
	3.1 Warning:				
	3.2 Instability:	This product is	stable.		
	3.3 Incompatibility:	Avoid contact with basics, acids and Hazardous reactions with mineral a (concentrated).		ls and oxidizing chen eral acids: sulfuric aci	nicals. ids, phosphoric, nitric
:	3.4 Hazardous products of decomposition:	No hazardous reaction when normally used.			
4.)	FIRST AID MEASURES				
	4.1 Inhalation:				n well ventilated areas
	4.2 Skin:	Burns: cool aff Do not remove	ected parts unde adhering mater		AC values. essing an seek medical
	4.3 Eyes:	Immediately flo	ood the eye with	n by skin contact. plenty of water for a	t least 15 minutes.
	4.4 Ingestion:	Obtain medica Do not induce unconscious. k	I attention. vomiting. Get m Keep warm and	edical attention. Do r at rest.	not give water when
5.)	FIRE FIGHTING MEASURES				
	5.1 Extinguishing media: 5.2 Unsuitable extinguished media: 5.3 Special fire fighting measures: 5.4 Special protective equipment for	Do not use was	ter jet.	foam – Dry powder.	
	fire fighting: Risks of explosure and fire:	Wear full prote	ctive clothing ar	nd self-contained bre	athing apparatus.

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6.)	ACCIDENTAL RELEASE MEASURES				
	6.1 Personal precautions: 6.2 Environmental precautions:	Wear appropriate protective clothing. Residues should be stored in closed containers. Extract fumes. Try to prevent the material from entering drains or water courses. Disposals			
	6.3 Measures for cleaning:	should be in accordance with local states. Scrapped off the released product, store it in a closed container before throughing it, wash the contamined surface with an organic solvant or a detergent. Transfer into suitable containers for recovery or disposal.			
	Other data:	Kühn-Brett Remarks "Hazardous materials" text.			
7.)	HANDLING AND STORAGE				
	7.1 Handling: 7.1.1 Personal protective equipment: 7.1.2 Measures for safety handling:	Wear gloves and eye-protection. Use local exhaust ventilation. Ensure efficient local air ventilation or extraction systems at the workplace. Extract fumes during the melting. Avoid breathing metal fumes. Make sure that people work in safety conditions. Do not drink, do not smoke in soldering areas.			
	7.1.3 Using advices:	Hazardous reactions with concentrated sulfuric acid, concentrated phosphoric acid and concentrated nitric acid.			
	7.2 Storage: 7.2.1 Conditions of storage and protective equipment:	Storage area should be at ambient temperature (20 ℃-25 ℃). Avoid sun exposure and heating.			
	7.2.2 Incompatible materials:	Strong oxidizing chemicals.			
	7.2.3 Recommended packaging:	Store in original containers. * plastics PP or PE, recyclable polypropylen spools, recyclable containers.			
	Not advisable:	* metallic (as aluminum).			
	Classification reference:	Page 13 according to VCI			
8.)	EXPOSURE CONTROLS AND PERSONAL PROTECTION				
	8.1 Occupational exposure standards:8.2 Personal protective equipment:	According to INRS ND 19456-153-93 et ND 1962-155-94: Ensure efficient air and vapour extraction/ventilation at the workplace.			
	Measures of control:	N°CAS Texts Material Values Units			
	Other measures:	Material Values Office			
	8.3 Personal protection: Respiratory protection:	P2, ensure appropriate air ventilation or extraction systems.			
	Hand protection:	Wear PVC or rubber gloves.			
	Eye protection:	Use correctly fitting protective goggles. Face shield when handling hot product.			
	Body protection:	Wear appropriate working clothes.			

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	8.4 General protective and hygienic instructions:	Do not eat, do not drink, do not smoke at the workplace. Wash hands thoroughly with water and soap before taking breaks, when finishing work and especially before eating. Keep away from food and beverages.	
9.)	PHYSICAL AND CHEMICAL PROPERTIES		
	9.1 Physical properties	Binary alloy n° 7 according to NF EN 29453 Standard	
		Physical state: Colour: Odour:	wire silver metal none
	Boiling point/range (°C): Boiling point/range (°C): Melting point/range: Density (at 20°C)	(of tin) (of silver) S-Sn96Ag4 S-Sn96Ag4	2260 ℃ 2595 ℃ 221 ℃ 7.3 g/cm³
	9.2 Chemical or incorporated flux	No-clean flux according to NF EN 29454.1 standard type 1.2.3 B	
		Flux R Flux FSW32	Flux RA Flux FSW26
	Halid content: I _A : Watersolubility (at °C): Solvent content: Softening point: Further Paticulars:	<0.005 160 to 190 Insoluble None 80 to 100°C According to Internation	0.86 208 insoluble none 80 to 100°C onal System ISO 31-8.
10.)	STABILITY AND REACTIVITY Conditions to avoid: Materials to avoid: Other particulars:	No decomposition if used in accordance with the specifications. Powerful oxidizing chemicals.	
11.)	TOXICOLOGICAL INFORMATION Toxicological analyses: Special remarks: General remarks:	This good is not concerned in its final shape. Possible intoxication by ingestion or by skin contact.	
12.)	ECOLOGICAL INFORMATION Persistence/Degradation:	Tin is not biodegradal	ole and cannot be disposed of.
	Water pollution:		ct: WGK. Do not allow to reach the ground water,
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	CSB-Values: BSB5: AOX-Data: General indications:	mg/g mg/g Containing the chemical formula of heavy metals (refer to Legal rules 76/464/CEE): Rest Tin (Sn), About 3.5% Silver (Ag).
13.)	<u>DISPOSAL</u> Product disposal:	The product which is not used and its wastes can be returned to the manufacturer. Metals should be recovered when possible.
	Waste code number: Container disposal:	N° Dispose of in accordance with the official regulations.
14.)	TRANSPORT INFORMATION RID/ADR - Class: IMDG -Class IATA - Class: Other regulatory arrangements: RIMO R/F:	Not hazardous product regarding transport Not classified No Not restricted none
15.)	REGULATORY INFORMATIONS	
	Labelling information:	This product is classified and labelled as hazardous substance.
	EU guidelines:	91/322/EU dated 29 may 1991: EU limit values NF EN 481 NF EN 482
	Documents in accordance to the regulations:	INRS 1945-153-93/revised in february 1995: professional exposure limits values to chemical substances. N $^\circ$ 27, 1990,20 p.
	Technical instructions for air:	
	Tin:	Emission 5 mg/m³ per 25 g/h mass current. Tin and its derivates belong to class III.
	Water hazard class:	
16.)	OTHER INFORMATION	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.