<u>Material Safety Data Sheet</u>

	s Used on Label and	List)				
Lead-free Resin Flux Cored Solder Wire "EVASOL J 3 - MYK - 3" 1. Chemical Product and Company Identification Product Name : Lead-free Resin Flux Cored Solder Wire "EVASOL J3-MYK-3" Manufacturer's Name : ISHIKAWA METAL CO., LTD. Address : 7-21 Chikkoh Hamadera Nishimachi Nishi-ku Sakai City, Osaka 592-8352 Japan Telephone Number : +81-72-268-1155 Fax Number : +81-72-268-1159						
Component A B C	Chemical Name Tin(Sn) Silver(Ag) Copper(Cu)	Mass% 93.6% 2.91% 0.49%	CAS No. 7440-31-5 7440-22-4 7440-50-8			
D	Activated Rosin	2.67%	8050-09-7			
Skin con	cact : May cause eye tact: May cause skin	irritation. irritation. properties of the	fully investigated. is substance have not been fully swallowed.	Ţ		
4. First Aid Measu	res					
Inhalatio		espiration. If l	n air immediately. If not brea preathing is difficult, give oxyg	0.		
Eyes	occasionally lift	ing the upper a	nning water for 15 minutes, and lower lids. Get medical a			
Skin Ingestior	least 15 minute	es while removin	with plenty of soap and water ng contaminated clothing and s Vash mouth out with water.			
5. Fire Fighting Mo Flammable p No infor	easures	-				

## 6. Accidental Release Measures

Sweep up, then place into a suitable container for disposal.

# 7. Handling and Storage

Handling:

Heating can release harmful fume. Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes.

Do not have any food, drink or smoke during soldering. Wash hands before eating or smoking after handling solder.

Storage:

Store in a cool, dry indoors prevent from direct sun shine.

## 8. Exposure Controls/Personal Protection

Engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal protective equipment:

Use protective gloves, safety glasses or goggles, and appropriate protective clothing to prevent exposure.

Exposure guidelines:

JODGLI	c gur	aomios	
Sn:	2	mg/m <sup>3</sup>	(OSHA : PEL,TWA)
Sn:	2	mg/m <sup>3</sup>	(ACGIH: TLV-TWA)
Sn:	<b>2</b>	mg/m <sup>3</sup>	(AUSTRALIA, BELGIUM, DENMARK, FINLAND, GERMANY,
			NETHERLAND, SWITZERLAND, PHILIPPINES, THAILAND:
			OEL-TWA)
Ag:	0.01	mg/m <sup>3</sup>	(OSHA : PEL,TWA)
Ag:	0.1	mg/m <sup>3</sup>	(ACGIH: TLV-TWA)
Ag:	0.01	mg/m <sup>3</sup>	(DENMARK, GERMANY, SWITZERLAND: OEL-TWA)
Ag:	0.1	mg/m <sup>3</sup>	(BELGIUM, FINLAND, FRANCE, UNITED KINGDOM:
			OEL-TWA)
Cu:	1	mg/m <sup>3</sup>	(OSHA : PEL,TWA)
Cu:	1	mg/m <sup>3</sup>	(ACGIH: TLV-TWA)
Cu:	1	mg/m <sup>3</sup>	(FINLAND, GERMANY, SWITZERLAND, THAILAND:
			OEL-TWA)

Rosin: Reduce to expose as low as possible. Thermal decomposition products, as resin acid – colophony, are sensitizer (ACGIH)

## 9. Physical and Chemical Properties

Appearance/Color	:	Gray solid wire.
Odor	:	Odorless
<b>Boiling</b> Point	:	Sn: 2270°C, Ag: 2155°C, Cu: 2582°C, Rosin:approx.200°C
Melting Point	:	Alloys: 217~219°C, Rosin: approx.70°C
Specific Gravity	:	Alloys: approx.7.4 (H2O=1 at 20°C)
Solubility in Water :		Insoluble

## 10. Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Strong oxidants.

Incompatibilities with other Materials:

Strong oxidizing agents, acids. Hazardous Decomposition Products:

ardous Decompo Not available.

Hazardous Polymerization:

Will not occur.

## 11. Toxicological Information

Inhalation Effects:

Soldering fumes can respiratory irritation, kidney and liver damage. Skin Effects:

May cause irritation, dermatitis.

Eyes Effects:

Can cause irritation and abrasion.

Ingestion Effects: May cause kidney and liver damage.

# 12. Ecological Information

No information available.

## 13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## 14. Transport Information

US DOT Hazard Class : Not regulated US DOT ID number : Not applicable Keep away from direct sunlight and contact with water. Avoid overturn, fall-down and any other damage on loading and transporting. Transport material under competent regulations in your country.

## 15. Regulatory Information

European/International Regulations:

European Labeling in Accordance with EC Directives for Tin(Sn), Silver(Ag) and Copper(Cu).

Hazard Symbols: Not available. Risk Phrases : Not available.. Safety Phrases : S 24/25 Avoid contact with skin and eyes. Please refer to any other national measures that may be relevant.

# 16. Other Information

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