

MATERICAL SAFETY DATA SHEET

1. Product and Company Identification

Product name:	EV-B M20		
Chemical Category:	Lead-free solder wire		
Product use:	Metal welding		
Company:	SOLNET METAL INDUSTRY CO.,LTD. No.9, Ln. 83, Huacheng Rd., Xinzhuang Dist., New Taipei City 242, Taiwan (R.O.C.) Tel:(02)29916040 Fax(02)29928901 Email:Solder@solnetmetal.com.tw http://www.solnetmetal.com.tw/		
Emergency phone number:	<u>Tel:(02)29916040</u> Fax(02)29928901		

2. Hazard Identification

Emergency classification: Inhalation Hazardous Substances Level 2

Warning information:

• GHS label:

· Signal word: Warning

- Hazard statement: Metal smog may occur at temperatures above about 500 ° C. Inhalation of metal fumes may cause anemia, insomnia, frailty, constipation, nausea, and abdominal pain. Excessive inhalation may harm the blood, nerves, reproduction, digestion, and urinary system.
- Precautionary statement: 1. Immediately remove contaminated clothing.
- 2. Immediately wash skin with soap and plenty of water.

Other hazards: None

3. Composition / Information on Ingredients

Mixtures:

Chemical identity:		
Names of ingredient	Concentration or Concentration range(% of contents)	
Tin	97.265%(CAS NO. 7440-31-5)	
Copper	0.735%(CAS NO. 7440-50-8)	
Rosin	2%(CAS NO. 65997-05-9)	



4. First-Aid Measures

First-aid measures for different exposure routes:

- Inhalation: Move the patient to fresh air and if the patient has stopped breathing, apply artificial respiration and send an emergency.
- Skin Contact: Rinse with plenty of water, such as soap. If irritation still exists, seek medical advice.
- Eye Contact: Rinse with plenty of water for 15 minutes or until the irritation disappears. If the irritating sensation still exists, seek medical advice.
- Ingestion: Do not induce vomiting (unless directed by your health care provider). If the patient is still conscious and awake, report immediately.

Most important symptoms and hazardous effects: NA

Notes to Physician: NA

5. Fire-Fighting Measures

Extinguishing Media: Use water spray, dry chemical or CO2 to extinguish fires. Use water to keep containers cool.

Fire and Explosion Hazards: It may cause irritative vapor if resin burns.

Special Firefighting Procedures: NA

Special Equipment for the Protection of Firefighters: Since vapors are exceedingly irritating when inhaled, a self - contained, positive- pressure breathing apparatus should be available to firemen.

6. Accidental Release Measures

Personal Precautions Persons who do not wear appropriate protective equipment do not allow enter unclean field.

Environmental Precautions: Keep ventilation.

Methods for Cleaning Up: Wash residue with soap and water.

7. Safe Handling and Storage Measures

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapor If used indoors, use mechanical exhaust ventilation. Wash thoroughly after handling.

Storage: Store in a cool, well-ventilated environment.

8. Exposure Controls / Personal Protection

Control parameters: Provide adequate mechanical exhaust.

Control Parameters:

• 8 hours time weighted average exposure limits TWA/ Short-term exposure limits

STEL/ Maximum exposure limits CEILING: Tin $2mg/m^3$ Copper $0.1mg/m^3$ / Tin $2mg/m^3$ Copper $1mg/m^3$ / NA.

• Biological standards: 3500µg/Kg (mouse, intraperitoneal injection)

Personal Protective Equipment

- Respiratory Protection: Use exhaust ventilation
- Hand Protection: General protective gloves to avoid burns.
- Eye Protection: Wear chemical splash-proof goggles or a face shield.
- Skin and Body Protection: Apron, long sleeves.

Specific Hygiene Measures: Before eating, drinking, smoking or using toilet facilities. Wash face and hands thoroughly with soap and water.

9. Physical and Chemical Properties

Appearance (physical state, color,	Odor: Tasteless
etc.) : Solid ,Silver grey	
Density: 7.3	Boiling Point: NA
Flash Point & Method Used: NA	Solubility: NA

10. Stability and Reactivity

Stability: Stable

Possible Hazardous Reactions Occurring under Specific Conditions: No information available

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: Carbon dioxide

11. Toxicological Information

Toxicological information on components of this product are as follows: NA

P Acute toxicity: NA

Chronic Toxicity or delayed Toxicity: NA

12. Ecological Information

Ecotoxicity: NA

Persistence and degradability: NA

Bioaccumulative potential: NA

Chronic Toxicity or delayed Toxicity: NA



13. Disposal Considerations

Recommended Methods for Safe and Environmentally Preferred Disposal:

Controlled incineration or buried landfill disposal should be in accordance with Taiwan and local environmental regulations.

14. Transport Information

UN number: NOT REGULATED

UN classification number: NOT REGULATED

Transport hazard class: NOT REGULATED

Packing group: NOT REGULATED

Marine pollution: NOT REGULATED

Specific precautionary transport measures and conditions: No information available

15. Regulatory Information

Applicable Regulations: Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that his activities comply with Taiwan and local laws. This information is not meant to be all-inclusive. Selected regulations are presented.

16. Other Information

Literature references			
	Name: SOLNET METAL INDUSTRY CO.,LTD.		
Organization	Address/Telephone: No.9, Ln. 83, Huacheng Rd., Xinzhuang Dist., New Taipei City 242, Taiwan (R.O.C.) Tel:(02)29916040		
Person who prepared the MDSD	Title: QA.	Name: CHEN CHIEN HAO	
Date the MSDS was prepared	2018.11.21		

Notice: Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that his activities comply with local laws. The following information is made for the purpose of complying with numerous country local laws and regulations. This Information is not meant to be all-inclusive. Selected Regulations are presented.

%NA:Not Applicable NE:Not Established