

# Material Safety Data Sheet

Soldering paste BS-850 1/3

IDENTITY: Soldering paste BS-850	
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## Section 1

Manufacturer's Name: TAIYO ELECTRIC IND. CO., LTD.		
Address: 2-16-8 Yamate Fukuyama Hiroshima	Telephone Number Fax Number for Information: Tel : 81-(84)-951-1512 Fax : 81-(84)-51-9531	
Japan 720-0092	Data Prepared: 12 Aug. 2002	Data Riviesed: 10 April 2014

## Section 2 – Material identification and information

Hazardous Component	CAS No.	OSHA PEL	ACGIH TLV	wt%
Chemical Name & Common Names (Hazardous Component 1% or greater ; Carcinogens 0.1% or greater)				
Rosin	65997-05-09	N.A.	N.A.	40-50
2-Methly-2, 4-pentandiol	107-41-5	N.I.	25ppm	40-50
Thixotropic agent				4-6
Organic acid				Under 1
Activator				1-3
Total				100.0

N.A. : Not applicable    N.I. : No information

## Section 3 - Physical/Chemical Characteristics (Methly, pentandiol)

Boiling Point	198.3°C	Specific Gravity (H <sub>2</sub> O=1)	About 1.0 (20°C)
Vapor pressure (mm Hg)	0.02mmHg (20°C)	Melting Point (°C)	<-50°C
Vapor Density (AIR=1)	Unknown	Evaporation Rate (Butyl Acetate=1)	Unknown

Solubility in Water:

: Soluble

Solubility in organic solvent

: Insoluble

Appearance and Odor:

: Brown paste with a slight ether-like odor

## Section 4 - Fire and Explosion Hazard Data

Flash Point & Method used (Methly, pentandiol) : 93°C	Flammable Limits:	UEL : 9.9%	LEL 1.0%
Auto-Ignition temperature: (Methly, pentandiol) 260°C			

Extinguishing Media:

Carbon dioxide, dry chemical, alcohol foam AFFF.

For small fire, dry chemical powder, carbon dioxide, foam should be used.

Special Fire Fighting Procedure:

Use self-contained breathing apparatus and full protective clothing and protection goggles for fires in enclosed areas. Extinguish from upwind. In case of fire, remove the ignition sources, use extinguishing measures. Cool the surfaces exposed to fire with water spray. In case of surrounding fire, immediately remove the container to a safe place. If not removable, cool container and surroundings with water.

Unusual Fire & Explosion Hazards:

It is a dangerous fire hazard and moderate explosion hazard when exposed to heat, flames or oxidizers.



**TAIYO ELECTRIC IND.CO.,LTD.**

**Section 5 - Reactivity Data IDENTITY**

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Stability:	Unstable		Conditions to Avoid: Keep away from heat, sparks and open flames.
	Stable	X	
Incompatibility: Oxidizing materials, acids, hydrogen peroxide			
Hazardous Decomposition or Byproducts: Rosin acids, CO, CO <sub>2</sub> , Aliphatic aldehyde			
Hazardous Polymerization	May Occur		Conditions to Avoid:  Not applicable
	Will Not Occur	X	

**Section 6 - Health Hazard Data**

Route of Entry : Inhalation, Ingestion, Skin absorption

**Health Hazards:**

Inhalation of dust or fumes may be irritating to the nose, throat, and lungs. Prolong or repeated contact with skin may caused irritation while contact with the eyes may caused irritation or burns. Ingestion causes irritation of the mouth and gastrointestinal tract.

Carcinogen listed in : Not listed

**Signs and Symptoms of Exposure:**

Mild irritation of the eyes, nose, and throat.

**Medical Conditions:**

Generally aggravated by exposure.

Emergency and First Aid Procedures-Seek medical assistance for further treatment, observation and support if necessary.

**Eye:**

Flush thoroughly with running water including under eyelids for at least 15 minutes and consult a physician.

**Skin:**

Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water. Get medical attention if irritation persists.

**Inhalation:**

Remove victim to fresh air. Restore and/or support promptly with water.

**Ingestion:**

Give 2-3 glasses of milk or water to drink to dilute. DO NOT induce vomiting.  
Seek medical help for treatment, observation and support after first aid.

**Section 7 - Precautions for Safe Handling and Use****Steps to be taken in Case Material is Released or Spilled:**

Notify safety personnel. Provide ventilation. This material is handled and disposed as a strong acid.

**Waste Disposal Method:**

Contact supplier or licensed chemical waste disposal contractor for treatment, packaging and disposal requirements.

**Precautions to be taken in Handling and Storing:**

Store in a clean, cool dry area away from sparks, open flames, and oxidizing agents.

**Other Precautions and/or special hazards**

Not applicable



**Section 8 - Control Measures**

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**Respiratory Protection:**

A self-contained respiratory equipment should be available for emergency.

Ventilation:	Local exhaust	Special: Not required
	Mechanical: NA	Other: NA
	Remove smoke from breathing area	

**Protective Gloves:**  
Use plastic or rubber gloves and aprons where necessary to avoid skin contact.

**Eye Protection:**  
Safety glasses or goggles should be worn in areas where splashing may occur.

**Other Protective clothing or equipment:**

Provide eye bath near work site and sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV's

**Work/Hygienic Practices:**

None

**Section 9 - Toxicological information**

2-Methly-2, 4-pentandiol

Acute toxicity: Oral (rat) LD<sub>50</sub>:4200mg/kg Skin (rabbit) LD<sub>50</sub>:7900mg/kg

Corrosive and irritant properties: Irritating to skin Severe irritating to eyes on rabbit test data.

Carcinogenic effects: No information

Specific target organ toxicity-single exposure: Irritating to respiratory system to human.

Possible narcosis is proven on rat or mouse oral test.

Specific target organ toxicity-repeated exposure: No information

Aspiration hazard: No information.

**Section 10 - Ecological information**

2-Methly-2, 4-pentandiol

Fish Toxicity: Killifish LC<sub>50</sub> (96h)>100mgL

Aquatic toxicity [Acute] : No infomation

Aquatic toxicity [Cronic] : No information

**Section 11 - Disposal Considerations**

Contact supplier or licensed chemical waste disposal contractor for treatment, packaging and disposal requiremets.

**Section 12 - Transport information**

Hazardous class: Not applicable

UN number: Not applicable

Specific precautions: Avoid direct sunlight. Check that no damage, no corrosion and/or no leakage before shipping. Be sure to avoid load shifting. Don't put it on heavyweight goods. Keep away from flammable materials. Follow all regulations in your country.

**Section 13 - Regulatory information**

RoHS directive (2002/95/EC) : 6 substances are not contained.

Follow all regulations in your country.

**Section 14 - Other information**

The information herein is given in good faith, but no warranty. Final determination of suitability any material is the sole responsibility of the user. All materials may present unknown hazards and should be used in caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.