



CP0198 / 1

Materials Safety Data Sheet

Circuit Works Conductive Epoxy

Stock Number: 498-265

Section 1. Identification of the Substance / Preparation and Company.

Product Name: 2400 Conductive Epoxy
Supplier: RS Components Ltd.,
 P.O.Box 99, Corby, Northants., NN17 9RS
 (+44) 0(1)536-402888

Section 2. Composition/Information on Ingredients

Ingredient	%range	Sym/let	Risk Phrases
<u>Resin</u>			
Bisphenol A epoxy resin	10-40	XI	Irritating to eyes and skin. May cause sensitisation by skin contact.
Silver (metallic)	60-90	—	—
Other components	1-10	—	—
<u>Hardener</u>			
Modified polyamine	60-90	XI	Irritating to eyes and skin. May cause sensitisation by skin contact.
Silver (metallic)	10-40	—	—
Other components	1-10	—	—

Section 3. Hazards Identification

Severe skin and eye irritant, respiratory irritant and skin sensitiser.

Section 4. First Aid Measures

Inhalation: Remove to fresh air. Administer oxygen if breathing is difficult.

Skin Contact: Immediately remove any contaminated clothing and wash thoroughly with soap and warm water.

Eye Contact: Irrigate immediately and continuously with clean, flowing water for at least 30 minutes.

Ingestion: Do not induce vomiting. Give water or milk to drink.

Medical Notes: If any adverse symptoms persist seek immediate medical attention.

Section 5. Fire-Fighting Measures

Suitable Extinguishing Media: Dry powder, foam, CO₂. Polymer foam for large fires.

Do not use: N.A.

Exposure Hazards: Oxides of nitrogen, carbon, ammonia; aldehydes and acids from incomplete combustion.

Protective Measures: Fire-fighters should wear self-contained breathing apparatus and protective clothing.

Section 6. Accidental Release Measures

Personal precautions: Refer to section 8; Personal Protection.

Environmental Precautions: Refer to Section 13; Disposal.

Methods of clearing up: Absorb spillage onto inert material. Scrape up and discard in suitable containers. Wash spill area with an industrial cleaning agent. If solvent is used for cleaning, take precautions against fire and personal overexposure.

Section 7. Handling and Storage			
Handling:	Keep away from eyes when handling material or before washing after use. Avoid skin contact. Wash thoroughly after using, particularly before eating or drinking.		
Storage:	Store in a cool, dry place.		
Section 8. Exposure Controls/Personal Protection			
Engineering Measures:	Local exhaust is recommended for prolonged or repeated use. Effective mechanical ventilation is required for occasional use. If cured material is sanded or machined, use proper precautions		
Personal Protection:	Respiratory protection not needed in normal use. In poorly ventilated areas use NIOSH-approved organic vapour mask. Wear safety glasses with side shields or splashproof goggles. Wear chemical-resistant rubber gloves. Other protective clothing as required to prevent skin contact.		
Section 9. Physical and Chemical Properties			
Appearance/Colour:	Silver grey paste	Flammability:	Low
Odour:	Hardener has amine odour	pH:	N.A.
Boiling Point/Range °C:	Resin >93 : Hardener 154	Melting Point °C:	N.A.
Flash Point °C:	Resin >93 : Hardener 120	Auto Ignition temp °C:	N.D.
Relative Density:	Resin 2.5-2.8:Hardener 2.8-3.5	Solubility/Miscibility:	Separate parts have low solubility in water.
Vapour Pressure @ 20°C:	>0.1 mmHg (Resin) <0.1 mmHg (Hardener)	Vapour Density (air=1):	Hardener >1
Evaporation Rate: (n-Butyl Acetate=1)	<1 for both parts	Conductivity:	No data in uncured state.
Section 10. Stability and Reactivity			
Stability:	Stable		
Conditions to Avoid:	Open flame and excessive heat. Heat is generated when both parts are mixed.		
Materials to Avoid:	Strong oxidising agents, acids and chlorinated organic compounds.		
Hazardous Decomposition Products:	Oxides of nitrogen, carbon and ammonia. Aldehydes and acids from incomplete combustion.		
Hazardous Polymerisation:	WILL NOT occur.		
Section 11. Toxicological Information			
<u>Toxic effects arising from exposure based on experimental/non experimental data</u>			
LD ₅₀ Values	Bisphenol A epoxy resin	>2.5g / kg (Oral Rat) : >2.3 g / kg (Dermal Rabbit)	
	Modified Aliphatic Amine	7.6 g/Kg (Oral Rat) : >2.0 g/Kg (Dermal Rabbit)	
<u>Chronic Effects of Overexposure</u>			
Contains Polyethylene polyamines which are reported to cause liver and kidney damage.			
Section 12. Ecological Information			
<u>Possible environmental effects and behaviour/ODP/aquatic toxicity</u>			
Do not allow entry into sewers or natural environment.			
Section 13. Disposal Considerations			
<u>Safe disposal of product, its residues and packaging materials:</u>			
Dispose of according to Local Regulations. See also Sections 7 & 8 for handling precautions and personal protection where applicable.			

Section 14.

Transport Information

Product is not classified as hazardous for transportation.

Section 15.

Regulatory Information

Labelling Information

Indication of Danger:

Black St. Andrew's Cross. Irritant.

Contains:

Epoxy constituents - see information supplied by the manufacturer.

Risk Phrases:

Irritating to eyes and skin.
May cause sensitisation by skin contact.

Safety Phrases:

Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, wash immediately with plenty of soap and warm water.

Occupational Exposure Limits

	Long-term exposure limit (8 hour TWA)	Short-term exposure limit (15 min period)
	ppm	mg/m³
Substance		
Silver (metallic)	— 0.01	— —

Ref. HSE Guidance notes EH40 / 94

Section 16

Other Information

Recommended uses and restrictions:

Prolonged or repeated overexposure may cause sensitisation and allergic response. Persons so affected should consult a doctor and if sensitisation is confirmed, should avoid further exposure to material. Use only for the purpose intended and as advised in the usage instructions.
Potential hazards to Health and Safety based upon research and experience in use.

Publication refs:

Compiled in accordance with CHIP Regulations 1993.
HSC Approved Code of Practice, Document L37.

Section 17.

Section Revision and Dates

Section:

Change:

Date:

Legend:

N.A.=Not Applicable or Not Available.
N.D.=Not Determined or Not Determinable.
Est.=Estimated.

The above information has been compiled from that provided by our suppliers and other sources. None of the original information relating to hazards or potential hazards has been omitted, and so the absence of a particular reference merely implies either that such information has not been determined or that it is not applicable. Should amendments become necessary, these will be published in future issues and forwarded to your organisation.