

ROADRUNNER ELECTRONIC PRODUCTS LIMITED

Material Safety Data Sheet

Product: Polyurethane Solderable Enamel

APPLICATIONS

Round and rectangular copper wires used in the windings of electrical machines, instruments and components.

CHEMICAL AND PHYSICAL PROPERTIES

- Composition of resin: Modified Polyurethane
- Physical State: Solid
- Thermal Class: (IEC 172): 155

STORAGE AND HANDLING AND TRANSPORT

- Special transport precautions: None
- Special Storage precautions: None
- Personal protection measures: None

INFLAMMABILITY AND EXPLOSION DANGER

- Not inflammable without primer
- With primer it is inflammable at temperature over 400°C
- It is immediately auto-extinguishing
- It is not explosive

TOXICOLOGICAL DATA

In the case of total destruction by fire (by persistent flame at 700°C) before auto-extinguishing, the product will exhale CO, CO₂, H₂O as steam and will leave carbon residue. HAZARDOUS FUMES or DUST may be generated when soldering, welding, burning, wire brushing, melting or processing enameled wires. Excessive exposure to dust may cause irritation to the eyes, skin and/or respiratory systems. The wearing of appropriate protective eye, skin and breathing equipment may be required. Inhalation of fumes should be avoided. The soldering of polyurethane enamel can present an Isocyanate inhalation hazard. Levels of free Isocyanate above the control limit can be generated during the soldering operation. It is recognised that exposure to Isocyanates can lead to sensitisation and occupational Asthma. Fumes should be removed by efficient exhaust ventilation.

EXPOSURE LIMITS

Exposure limit 0.020mg per cubic metre for an 8 hour time weighted average reference period. Short term exposure limit 0.07mg per cubic metre for a 10 minute period.

ECOLOGICAL DATA

Waste should normally be recycled due to the high value of the base metal.

It should be noted that enameled wires are lubricated with wax at < 75mg per square metre of wire surface.