Solderable Enamelled Copper Wire

multicomp PRO

RoHS Compliant

Applications

Used as winding wire for transformers, coils, relays, and magnet coils. it is used for prototype wiring, PCB track repairs and shorting links.

Features

- Insulation Coating Polyurethane (Quick Solderable Enamel, QSE)
- Solderable Enamelled Copper Wire*
- Colours – gold/copper, pink/red, green, violet/blue and assorted coloured bobbins coated in self-fluxing polyurethane, conforming to IEC60317-0-1**
- Maximum continuous Temperature: +120°C

Specification Table

Part Number	Insulation Breakdown	Resistance	Current Rating	Wire Diameter	Colour	Reel Length
MPRRP-A-105	Grade 1 – 1650V; Grade 2 – 3100V	0.967 Ω/m	60mA	0.15mm	Assorted (Gold, Green, Pink, Violet)	38m
MPRRW-A-105	Grade 1 – 1750V; Grade 2 – 3400V	0.603 Ω/m	90mA	0.19mm	Assorted (Gold, Green, Pink, Violet)	27m
MPRRW-G-105	Grade 1 – 1750V; Grade 2 – 3400V	0.603 Ω/m	90mA	0.19mm	Green	27m
MPRRP-G-105	Grade 1 – 1750V; Grade 2 – 3400V	0.603 Ω/m	90mA	0.19mm	Green	38m
MPRRP-C-105	Grade 1 – 1650V; Grade 2 – 3100V	0.967 Ω/m	60mA	0.15mm	Gold	38m
MPRRP-P-105	Grade 1 – 1650V; Grade 2 – 3100V	0.967 Ω/m	60mA	0.15mm	Pink	38m
MPRRW-V-105	Grade 1 – 1750V; Grade 2 – 3400V	0.603 Ω/m	90mA	0.19mm	Violet	27m
MPRRW-C-105	Grade 1 – 1750V; Grade 2 – 3400V	0.603 Ω/m	90mA	0.19mm	Gold	27m
MPRRW-P-105	Grade 1 – 1750V; Grade 2 – 3400V	0.603 Ω/m	90mA	0.19mm	Pink	27m
MP005871	Grade 1 – 1650V; Grade 2 – 3100V	0.967 Ω/m	60mA	0.15mm	Violet	38m

*Caution: Emits toxic vapour when soldered. Ventilate area well.

**The colours can vary, therefore there may be a difference between one batch and another, as supplied by our manufacturer. Due to occasional supply issues, the wire diameters may vary - 0.15mm may be offered as 0.16mm, and 0.19mm may be offered as 0.20mm. Also, the grade may vary from Grade 2 to Grade 1.

Safety Information

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 temperatures over 400°C
It is immediately auto-extinguishing
It is not explosive

Toxicoligical Data

In the case of total destruction by fire (by persistent flame at 700°C) before auto-extinguishing, the product will exhale CO, CO_2, H_20 as steam and will leave carbon residue. HAZARDOUS FUMES or DUST may be generated when soldering, welding, burning, wire brushing, melting or processing enamelled 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 0.02mg 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.

Proposition 65 – California Safe Harbor Warning

The chemical toluene diisocyanate, is listed under Prop 65 and is designated ‘NSRL’, No Significant Risk Level of exposure.