# Solderable Enameled Copper Wire





RoHS Compliant

## **Applications**

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

## **Features**

- Insulation Coating Polyurethane (Quick Solderable Enamel, QSE)
- · Solderable Enameled Copper Wire\*
- Colors gold/copper, pink/red, green, violet/blue and assorted colored 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	Color	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	0.15mm	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

<sup>\*</sup>Caution: Emits toxic vapor when soldered. Ventilate area well.

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<sup>\*\*</sup>The colors 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.

# Solderable Enameled Copper Wire



## **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

#### **Toxicological Data**

In the case of total destruction by fire (by persistent flame at 700°C) before auto-extinguishing, the product will exhale CO, CO<sub>2</sub>, H<sub>2</sub>O 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 recognized that exposure to Isocyanates can lead to sensitization and occupational Asthma. Fumes should be removed by efficient exhaust ventilation.

## **Exposure Limits**

Exposure limit 0.02mg per cubic meter for an 8 hour time weighted average reference period. Short term exposure limit 0.07mg per cubic meter 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 meter 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.

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