

# Solderable Enamelled Copper Wire

multicomp<sup>PRO</sup>

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.

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

multicomp<sup>PRO</sup>

# Solderable Enamelled Copper Wire

**multicomp** PRO

## 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 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.

**Important Notice** : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

**multicomp** PRO