

With the **bercoweld**® S2 wire electrode, welding and brazing processes in automotive engineering can be significantly optimized. The copper solder wire offers even better functionalities such as optimized flow properties, better gap bridging, and higher processing speed.

This filler material has been specially designed for use on coated sheets for the automotive industry. Good flowing weld pool, no tendency for pore or splatter formation are only some of the advantages. Suitable for welding Cu and Cu alloys as well as unalloyed and low-alloyed steels and cast iron.

MIG: Pulsed power welding is recommended.

TIG: Preheating to about 250° - 300 °C is recommended for sheet thicknesses of more than 3.00 mm.

Standardization and composition

ISO 24373	CuSi2Mn1 Cu6511
Cu	balance
Si	1.70 - 1.90
P	0.008 - 0.012
Mn	0.90 - 1.10
Sn	0.17 - 0.25

Physical properties

Density (kg/dm³)	8.7
Melting range (°C)	1030 - 1050
Thermal conductivity (W / m x K)	40
Coefficient of linear mean expansion (10⁻⁶/K)	18.1
Electric conductivity (m / Ω x mm²)	4.7 - 5.3
Resistivity (Ω x mm² / m)	0.188 - 0.213

Mechanical properties of the weld joint (standard data)

Heat treatment	non treated
Tensile strength (MPa)	285
Elongation (%)	45
Brinell hardness (HB 2.5/62.5)	62
Notched bar impact test (Av (J))	75

Delivery options

Make-up	Weight/Length	Dimension
Drum / bedradox	175 - 200 kg	0.80 - 1.60 mm
SD300 / BS300 / K300	12 - 15 kg	0.80 - 2.40 mm
H500 / H560 / H760	150 - 250 kg	0.80 - 2.40 mm
Coils	25 - 100 kg	1.60 - 6.00 mm
Rods	250 - 3000 mm	1.60 - 6.00 mm