

# Product Information

## Brass hard solder, B-Cu60Zn(Ni)(Mn)

For hard soldering of steel and galvanised steel, copper, nickel, casting material as well as for welding of brass and bronze

ISO 3677, DIN EN 1044; CU303

L-CuZn40, DIN 8513

Material-No.: 2.0367

Brass hard solder "blank", Brass hard solder "UM", Brass hard solder "G"

Art.-No.: 3000..../3001..../3002....

All information about our products are the result of our long standing experience, which we would like to pass on to our customers. Since we do not have any influence on the application with our products, please see the warranty claims in our conditions of sale because our liability is limited.

This product information does not represent warranted properties.

Brass hard solder "blank", B-Cu60Zn(Ni)(Mn), (L-CuZn40)  
 Brass hard solder "UM", B-Cu60Zn(Ni)(Mn), (L-CuZn40)  
 Brass hard solder "G", B-Cu60Zn(Ni)(Mn), (L-CuZn40)

## Description

Hard solder with perfect strength for soldering steel and galvanized steel, copper, nickel and casting as well as welding rods for welding brass and bronze.

## Properties

Our brass hard solder has excellent flow characteristics. Due to the Mn-, Si- and Sn- contents the solder shows an optimal resistance against corrosion. Furthermore, the cracking will be prevented.

By galvanized steel the zinc flows back to the soldering joint after taking away the flame, so that in the field of the warmth zone an optional corrosion protection is ensured.

<b>Composition (weight-%)</b>	:	Cu	58,5 - 61,5
		Si	0,15 - 0,4
		Mn	0,05 - 0,25
		Sn	≤ 0,20
		Zn	Rest

**Working temperature** : approx. 900°C

**Melting range** : solidus: 870°C  
 Liquidus: 900°C

**Tensile strength of soldering** : 350 - 400 N/mm<sup>2</sup>

**Density** : 8,4 g/cm<sup>3</sup>

## Application field

For hard soldering of steel, galvanized steel, casting, copper, nickel. The soldering joints are applicable with operating temperatures to 400°C. In addition our brass hard solder is for welding brass and bronze excellent suitable

## Application advices

Soldering parts must be free of oxide layers, tinder dross, oils and greases. When using blank rods, we recommended using the hard solder paste "Universal" or hard solder powder "Universal".

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**Brass hard solder "G", B-Cu60Zn(Ni)(Mn), (L-CuZn40)**

When using flux-coated hard solder (brass hard solder "UM"):  
 Work piece is heat up of up to 400°C, apply solder rod and let the flux melt. Heat up to working temperature and let the solder melt off. The flame of the solder burner should be adjusted neutral. The flux residues have to be removed thoroughly; they are water soluble.

When using flux-cored hard solder (brass hard solder "G"):  
 Work piece is heat up to working temperature, directly, apply solder rod and let the flux melt. The flux residues have to be removed thoroughly; they are water soluble.

## Delivery forms

Delivery form	Dimensions
1000 mm rods blank	Ø 1,5 mm
	Ø 2,0 mm
	Ø 2,5 mm
	Ø 3,0 mm
	Ø 4,0 mm
	Ø 5,0 mm
500 mm rods flux-coated hardsolder „UM“ FH 21 acc. DIN EN 1045	Ø 2,0 mm
	Ø 2,5 mm
	Ø 3,0 mm
	Ø 4,0 mm
500 mm rods flux-cored hardsolder „G“ FH 21 acc. DIN EN 1045	Ø 2,5 mm
	Ø 4,5 mm

## Further informations

Protect against humidity.

Please do not hesitate to contact us for any further information.