

Product Information

Special Brass Brazing Alloy Cu 681

Acc. EN ISO 17672, CU 305 – EN 1044, ISO 3677 – B-Cu58ZnSn(Fe)(Mn)(Si)-866/888,
For brazing steel and galvanised steel, copper, nickel, casting material
as well as for welding of brass and bronze

Special Brass Brazing Alloy “blank“ without flux

Special Brass Brazing Alloy “UM“ with flux coat FH 21- EN ISO 18496 (former EN 1045)

Item No.: 3010...../3011.....

All information about our products is the result of our long-standing experience, which we would like to pass on to our customers as application support. 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 constitute warranted properties.

Description

Special brass rods with excellent strength for brazing steel and galvanised steel, hot-dip galvanised steel pipes and -fittings, copper, nickel and cast iron as well as for the welding of brass and bronze.

Properties

Our **Special Brass Brazing Alloy Cu 681** is characterised by particularly good flow properties. Due to the Mn-, Si- and Sn- content the developing of corrosion at the interface surfaces of the base material is significantly reduced. Furthermore, it almost completely prevents the building of cracking in the brazed joints.

Composition (%):	Cu	56.0 - 60.0
	Si	0.04 - 0.15
	Sn	0.8 - 1.1
	Mn	0.01 - 0.50
	Fe	0.2 - 1.2
	Ni	-
	Ag	-
	Zn	rest

Working temperature: approx. 900 °C

Melting range:
solidus: 866 °C
liquidus: 888 °C

Tensile strength: 380 - 420 N/mm² depending on base material

Application Field

For brazing steel, galvanised steel, casting materials, copper, and nickel. The brazed joints are applicable with operating temperatures up to 400° C. In addition, our special brass hard solder is suitable for welding brass and bronze. Excellently suitable for brazing of galvanised steel in drinking water installations (acc. to TRWI; DIN 1988, part 2 and 7) as well as for piping systems, of ventilation- and heating systems, fire sprinklers and for the sealing of heating radiators and compressed-air lines.

Application Advice

Brazing parts must be free of oxide layers, tinder, dross, oils and greases. When using blank rods, we recommend using our **brazing flux paste "Universal"** or **brazing flux powder "Universal"**.

When using flux-coated rods (**Special Brass Brazing Alloy "UM"**): pre-heat the work piece up to approx. 400° C, apply rod and let the flux melt off, then heat up to working temperature and let the alloy melt off. The flame of the burner should be adjusted neutral. The flux residues have to be removed thoroughly with water.

Delivery Forms

Delivery forms	Dimensions
500 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	Ø 6.0 mm
	Ø 2.0 mm
	Ø 2.5 mm
	Ø 3.5 mm

Further Information

Protect against humidity.