

Product Information

FELDER Silver hard solders for drinking water installation

Ag 244, Ag 134, Ag 145 acc. to DIN EN ISO 17672

DVGW conform, awarded the RAL mark of quality of Gütegemeinschaft Kupferrohr e.V.

Item-No. 34

Since 2015 we abstain from using environmental harmful colourants and deliver our silver hard solders with white flux coat and imprinted alloy, dimension and batch number.



All information about our products are the result of our long standing experience which we would like to pass on to our customers as application support. However, as we do not have any influence on the application of the works carried out 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

L-Ag44, L-Ag34Sn, L-Ag45Sn are silver hard solders for the drinking water installation.
 Ag 244, Ag 134, Ag 145 according to DIN EN ISO 17672;
 B-Ag44CuZn, B-Cu36AgZnSn, B-Ag45CuZnSn according to ISO 3677.

Properties

Our silver hard solders for the drinking water installation are characterised by excellent flowing properties and high tensile strength.

Name acc. to EN ISO 17672	Name acc. to DIN 8513	Melting range	Working temperature	Tensile strength of the braze joint	Density
Ag 244	L-Ag44	675-735 °C	730 °C	450 N/mm ²	9,8 g/cm ³
Ag 134	L-Ag34Sn	630-730 °C	710 °C	430 N/mm ²	9,0 g/cm ³
Ag 145	L-Ag45Sn	640-680 °C	670 °C	400 N/mm ²	9,2 g/cm ³

Composition

Alloy (DIN EN ISO 17672)	Composition (in weight-%)			
	Ag	Cu	Zn	Sn
Ag 244 (L-Ag44)	44	30	26	-
Ag 134 (L-Ag34Sn)	34	36	27	3
Ag 145 (L-Ag45Sn)	45	27	25	3

Application

For brazing steel, malleable cast iron, copper, copper alloys, nickel and nickel alloys. The solder joints can be used at working temperatures up to + 200 °C. Also suitable for cryogenic applications. No significant reduction in the tensile strength and notched impact strength of solder joints on copper, brass and steel at -196 °C. The bare material must be used in combination with a flux according to DIN EN 1045 - FH 10 ("CuFe no.1"-paste or "CuFeP"-powder) are soldered. Approved for brazing copper pipes in cold and hot water installations according to DVGW, worksheet GW 2. These solders are also used in the medical and food sector. Also suitable for piping with which technical gases are transported, e.g. Oxygen, Nitrogen, Hydrogen, CO₂ and noble gases, e.g. Argon and Helium.

Application Advice

Soldering parts must be free of oxide layers, tinder, dross, oil and greases. When using bare rods, apply sufficient flux on the soldering joint and surroundings. Heat the working piece up to working temperature, put soldering rod into position and let the solder run.

When using flux-coated solders, heat up work piece to 250° C, put soldering rod into position and let flux melt. Heat up to working temperature and let the solder melt. Adjust the flame of the soldering burner neutral up to light decreasing (gas surplus). The water-soluble flux residues have to be removed carefully.

Delivery Forms

Delivery forms	Dimensions
500 mm rods	Ø 1,0 mm
1 kg manufacturing rings	Ø 1,5 mm
Wire on spools	Ø 2,0 mm
	Ø 3,0 mm
Flux-coated rods acc. to DIN EN 1045	Ø 1,5 mm x 500 mm
	Ø 2,0 mm x 500 mm
	Ø 3,0 mm x 500 mm

Further Advice

Felder cadmium-free silver hard solders do not contain any substances that are subject to restriction by directive 2011/65/EU ("RoHS") above 0.1 weight-% (0.01 weight-% for cadmium) with regard to each homogenous material.

Store protected from humidity.

Stored dry and dust-free, the material is durable for an unlimited period.