

Product Information

Special soft solder 139°C

Lead-free, eutectic two-substance alloy
Bi58Sn42 according EN ISO 9453

Art.-No.: 1323....

FELDER lead-free special soft solder alloys don't contain any substances, for which there are restrictions in the regulation 2011/65/EU ("RoHS II").

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

FELDER Special soft solder 139 °C (Bi58Sn42) is mainly applied as fuse alloy for automatic extinguishing equipment, warning devices and other security devices. It is also usable for low temperature, second level soldering applications in electronic assembly production.

Properties

Density:	8.1 g/cm ³
Hardness:	19 HB
Tensile strength:	~59 N/mm ²
Shear strength:	~20 N/mm ²
Elongation:	50 %
Electrical conductance:	4.0 m/Ω mm ²
Melting point/Melting range:	139 °C

Chemical composition according to EN ISO 9453 in mass-%

Sn: 42 ± 1.0	Pb: 0.07	Sb: 0.10	Bi: rest
Cu: 0.05	Au: 0.05	In: 0.10	Ag: 0.10
Al: 0.001	As: 0.03	Cd: 0.002	Fe: 0.02
Ni: 0.01	Zn: 0.001		

Advices

A direct soldering on steel with high-bismuth solders is not possible. We recommend to copper respectively to tin steel surfaces before soldering.

Solders with a high bismuth content solidify in coarse crystalline form and are slowly malleable. When deformed quickly, the material becomes brittle and breaks easily. It is characteristic that the alloy expands after solidification (density anomaly - negative thermal expansion).

Can be stored indefinitely at constant room temperature, dry and dust-free

Do not hesitate to ask for more information.

Delivery forms

Rods, blocks and massive wire