



# Product Information

## **FELDER-ISO-Tin<sup>®</sup> - Lead-free, Sn99.3Cu0.7**

according to ISO 9453:2014,  
Art.-No.: 12940 ...

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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.

## Application

Lead-free soldering in the field of electronics, high temperature application e. g. in automotive industry (good temperature change resistance at high temperatures) constant temperature up to 120°C.

## Properties

Metallic composition	:	99.3% Sn, 0.7% Cu
Melting range/point	:	227°C
Electrical conductivity	:	7.5 m/Ωmm <sup>2</sup>
Specific Resistivity	:	1.33 x 10 <sup>-1</sup> Ωmm <sup>2</sup> /m
Thermal expansion coefficient	:	21.5 x 10 <sup>-6</sup> K <sup>-1</sup>
Specific weight	:	7.3 g/cm <sup>3</sup>
Creep strength	at 20°C :	8.6 N/mm <sup>2</sup>
	at 100°C :	2.1 N/mm <sup>2</sup>
Shearing strength	at 20°C :	23 N/mm <sup>2</sup>
	at 100°C :	16 N/mm <sup>2</sup>

## Impurities/tolerances acc. to DIN EN ISO 9453:2014

<u>Ag</u>	<u>Al</u>	<u>As</u>	<u>Bi</u>	<u>Cd</u>	<u>Cu</u>	<u>Fe</u>	<u>Pb*</u>	<u>Ni</u>
0.1	0.001	0.03	0.1	0.002	0.7 ± 0.2	0.02	0.07	0.01
<u>Sb</u>	<u>Sn</u>	<u>Zn</u>						
0.1	Balance	0.001						

\* The maximum lead content in FELDER electronic solder is 0.05 % (standard requirement 0.07%).

## Wetting balance graph

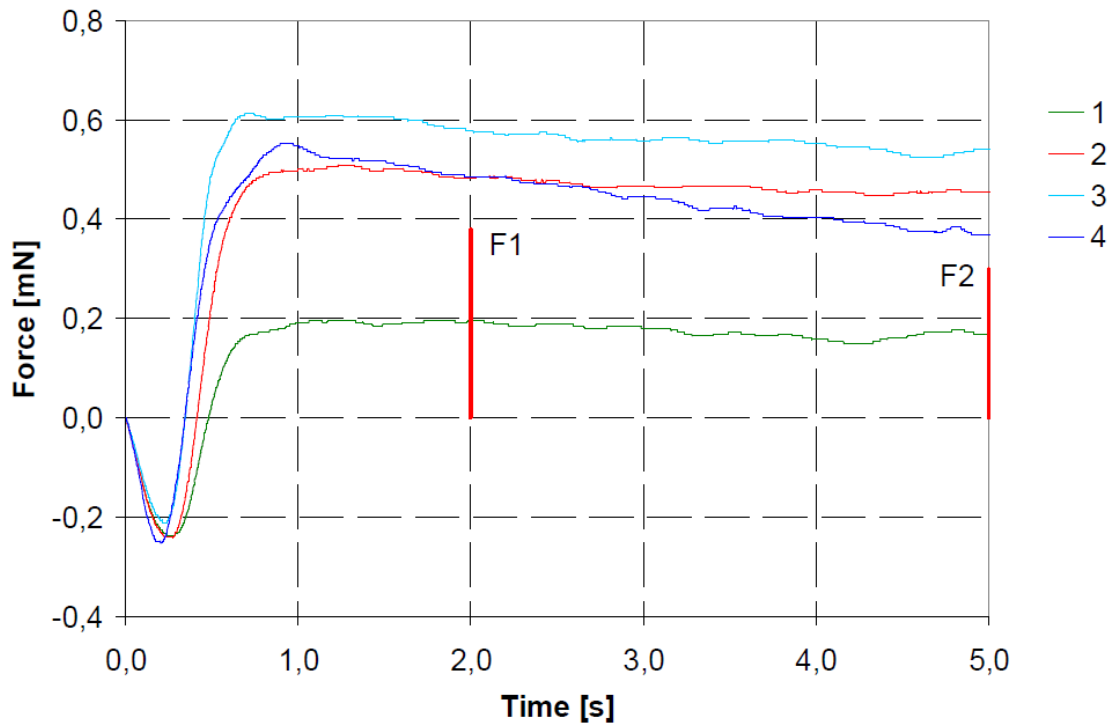
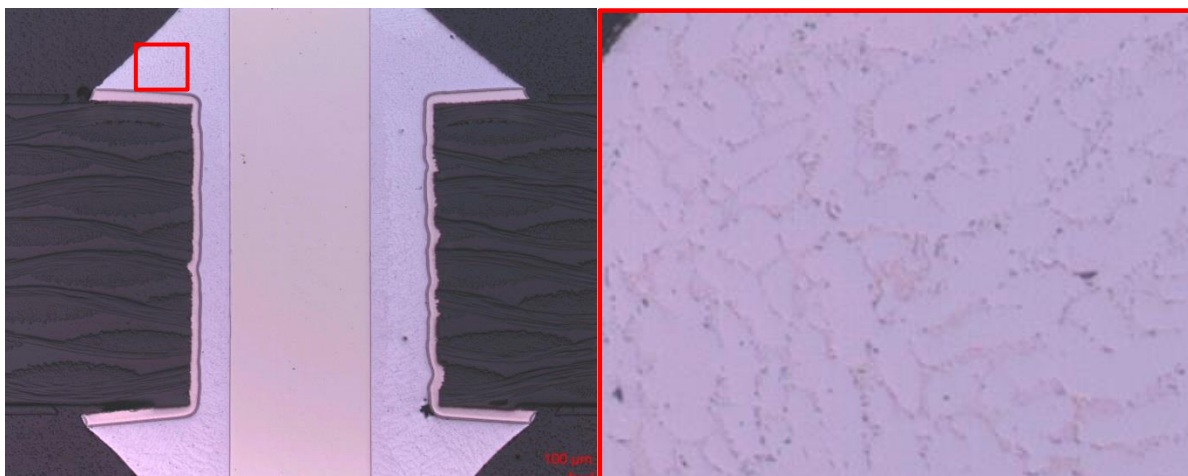


Bild 3-8: Benetzungsverlauf mit Sn99Cu1

## Typical microstructure



## Delivery forms

250 g triangular rods, 400 mm long,  
1.0 kg - rod 330x20x20 mm,  
3.5 kg – block with hanging hole 545x47x20 mm.

Also deliverable as massive wire on spools for automatic feeding and as wire segments for first filling.

## Advices

**FELDER-ISO-Tin® Lead-free, Sn99.7Cu0.7 solder bars and wires do not contain any substances that are subject to restriction by directive 2011/65/EU (“RoHS”).**

Every delivery is provided with a batch number. If requested an analysis certificate will be furnished. The analysis values are ascertained by the means of an optical emission spectrometer.

Other alloys are included in our standard delivery program.