

## TECHNICAL DATA SHEET

Alloy designation according to ISO 9453:	<b>Sn63Pb37</b>
Product form:	Solid solder bars, sticks, rods
Other known alloy markings:	S-Sn63Pb37 • LC63

### 1. General characteristics

Soldering alloy Sn63Pb37 is produced by Cynel-Unipress in the first melting of tin and lead. Its chemical composition complies with ISO 9453 standard. The use of continuous casting process ensures that formation of metal oxides in the soldering alloy is minimized. As a result, negative impact of dross formation during soldering process has been significantly reduced. It is basic tin-lead alloy for manual, automatic and robotic processes used in industrial applications in electronics and electrical engineering, where compliance with the requirements of the RoHS directive is not required. Due to its lead content it cannot be sold to private consumers and its use is restricted to professional applications only.

### 2. Chemical composition and physical characteristics

- 2.1. Tin content: 62.5 – 63.5%
- 2.2. Lead content: rest
- 2.3. Purity class of raw materials used for smelting: min. 99.90%
- 2.4. % composition and maximum values of impurities acc. to ISO 9453 standard:

Sn	Pb	Sb	Bi	Cd	Cu	Au	In	Ag	Al	As	Fe	Ni	Zn	other
62,5 - 63,5	rest	0,2000	0,1000	0,0020	0,0800	0,0500	0,1000	0,1000	0,0010	0,0300	0,0200	0,0100	0,0010	-

- 2.5. Melting point: 183 °C (eutectic alloy)
- 2.6. Specific weight: ~8.40 g/cm<sup>3</sup>
- 2.7. Resistivity: 0,145 μΩ·m
- 2.8. Thermal conductivity: 50 W/m·K
- 2.9. Tensile strength at break: 525 kg/cm<sup>2</sup>
- 2.10. Elongation at break: 37%
- 2.11. Hardness: 17 HB
- 2.12. Recommended soldering temperature (tip): 340 - 400 °C

### 3. Other information

- 3.1. Dimensions and ackaging: 7 x 7 x 350 mm • carton box 25 kg  
20 x 40 x 400 mm • carton box 26 kg
- 3.2. Product with other dimensions (e.g. 10 x 40 mm x 1 kg or 20 x 20 mm x 1 kg) can be made to individual order.
- 3.3. Expiry date: Unlimited under normal storage conditions.
- 3.4. Markings: Carton boxes marked with alloy, dimensions of product, weight and batch number.
- 3.5. Storage: Store at room temperature in a dry place out of reach of children.

