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SOLDER PASTES • SOLDER WIRES & BARS • SOLDERING FLUXES • SOLDER POWDERS

TECHNICAL DATA SHEET

Alloy designation according to ISO 9453:2014:	**Sn60Pb40**
Flux designation:	**SW26**
Product form:	Cored solder wire
Other known alloy markings:	S-Sn60Pb40 • LC60

1. General characteristics

Soldering alloy Sn60Pb40 is produced by Cynel-Unipress in the first melting of tin and lead. Its chemical composition complies with ISO 9453. The use of a continuous casting process ensures that the formation of metal oxides in the soldering alloy is minimized. As a result, the negative impact of the formation of the dross during the soldering process has been significantly reduced. This product is designed for a wide range of industrial applications in electronics and electrical engineering where RoHS compliance 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. Lead content: the rest
2.2. Tin content: 59,5 – 60,5%
2.3. Purity class of raw materials used for smelting: min. 99.90%
2.4. % composition and maximum values of impurities:

Sn	Pb	Sb	Bi	Cu	Au	In	Ag	Al	As	Cd	Fe	Ni	Zn	other
59,5 - 60,5	rest	0,2000	0,1000	0,0800	0,0500	0,1000	0,1000	0,0010	0,0300	0,0020	0,0200	0,0100	0,0010	-

2.5. Melting point (solidus/liquidus): 183/190 °C
2.6. Specific weight: ~8,50 g/cm^3
2.7. Resistivity: 0,153 µΩ·m
2.8. Thermal conductivity: 49 W/m·K
2.9. Tensile strength at break: 535 kg/cm^2
2.10. Elongation at break: 40%
2.11. Hardness: 16 HB
2.12. Recommended soldering temperature (tip): 340 - 400 °C

3. SW26 flux

Halide flux based on modified rosin. It provides very good solderability in popular applications in all branches of industry, as well as in hobby applications. The flux works on most metal surfaces except aluminum, its alloys and stainless steel. Flux residues after soldering do not have to be removed and may remain on the soldered surface. Alcohol-based solvents are recommended for washing up the residues.

3.1. Designation according to DIN 8511: SW26
3.2. Designation according to ISO 9454-1: 1.1.2
3.3. Designation according to J-STD-004: ROL1
3.4. Standard flux contents: 2,2% i 2,5% ± 0,2%
other flux contents from 0.8% to 3.5% are negotiable
3.5. Halide content: 0,5%
3.6. Acid number: 180 mg KOH/g
3.7. Copper mirror test: passed (in accordance with J-STD-004 IPC-TM-650 2.3.32D)
3.8. Corrosiveness: noncorrosive

4. Other information

4.1. Available diameters [mm]: 0,25 • 0,38 • 0,50 • 0,56 • 0,70 • 0,80 • 0,90 • 1,00 • 1,20 • 1,50 • 2,00 • 2,50 • 3,00 • 4,00
Other wire diameters possible to be agreed.
4.2. Spools and packaging: Spools 100 g - carton boxes of 30 pcs and 60 pcs
Spools 250 g - carton box of 5 kg
Spools 500 g - carton box of 5 kg
Spools 1 kg - carton box of 10 kg
4.3. Expiry date: 3 full years from the end of the year of production given in the product batch number.
E.g.: batch no. **6**1112233 = year of manufacture 201**6**, validity until the end of 2019.
4.4. Markings: Spools and carton boxes marked with alloy, flux type, percentage content of flux, diameter, weight and batch number.
4.5. Storage: Store at room temperature in a dry place out of reach of children.

ISO 9001:2015
ISO 14001:2015

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