

SOLDER S-Pb93Sn5Ag2

High lead containing solder for electronic application

DESCRIPTION

The standard alloy S-Pb93Sn5Ag2 (DIN EN ISO 9453, alloy 191) contains a high amount of lead which shows a high melting range between 296-301°C. This melting range will not be covered by any affordable other soft solder. This is one of the reasons, why this high lead containing alloy is still essential for some electronic applications.

Manufactured by Stannol in the established high purity following the DIN EN ISO 9453, this alloy can be used for applications which require up to 200°C as continuous operating temperatures on the solder joints. Additionally this alloy can be used if lowest dissolution rates of copper at high working temperatures are required. For this kind of application the FLOWTIN TC300 (Sn97Cu3+ML) can be a lead-free alternative.

This high lead containing alloy, when used for manufacturing for electric and electronic products, might be part of the exemptions of the ROHS2 (solders, which contain >85% of lead). If this exemption applies, needs to be checked in each single case.

CHARACTERISTICS

This solder shows the following advantages:

- Melting range 296-301°C
- Dull finish of solder joints due to high lead content
- High continuous operating temperatures up to 200°C are possible
- Low oxidation forming due to low tin content
- Manufacturing temperatures from 380-500°C are possible

PHYSICAL PROPERTIES – DATA and ANALYSIS

PROPERTIES	S-Pb93Sn5Ag2
Melting point/-range	296-301°C
Density	11.1 g/cm ³
ELEMENT	S-Pb93Sn5Ag2
Sn:	4.8 – 5.2
Pb:	remainder
Cu:	0.002
Ni:	<0.001
Sb:	0.005
Ag:	1.2 – 1.8
Bi:	0.010
As:	<0.001
In:	<0.001
Fe:	0.001
Au:	<0.001
Cd:	<0.001
Zn:	<0.001
Al:	<0.001

SUPPLY FORMS

Solder Wire (solid and flux cored with HS10)
Triangular bars, extruded

HEALTH AND SAFETY

Before using please read the material safety data sheet carefully and observe the safety precautions described.

NOTICE

The above values are typical and represent no form of specification. The Data Sheet serves for information purposes. Any verbal or written advise is not binding for the company, whether such information originates from the company offices or from a sales representative. This is also in respect of any protection rights of third parties, and does not release the customer from the responsibility of verifying the products of the company for suitability of use for the intended process or purpose. Should any liability on the part of the company arise, the company will only indemnify for loss or damage to the same extent as for defects in quality.