



DESCRIPTION

SIRIUS 1 LF Di no-clean dispensing grade solder paste has been developed in MBO laboratories. It is designed to offer a high level of activity by leaving low residues, clear and non-corrosive. This product, suitable for dispensing applications meets the international requirements of the electronics industry.

- **ROLO classification (J-STD-004)**
- Halide free.
- **RoHS compliant.**
- High activity.
- Low and neutral residues.
- Extended tack-life (>24 hours).
- Excellent slump resistance.

SIRIUS 1 LF Di no-clean dispensing grade solder paste is manufactured in compliance with the international standards.

AVAILABLE ALLOYS

Alloy	Alloy number ISO 9453 (2014)	Melting Point (°C)	Metal content (%)	Viscosity (Pas)
Sn96.5Ag3.5	703	221	85 - 86	300 - 500
Sn96.5Ag3Cu0.5	711	217/220	85 - 86	300 - 500
Sn95.5Ag3.8Cu0.7	713	217	85 - 86	300 - 500
Sn99Ag0.3Cu0.7	501	217/227	85 - 86	300 - 500
Sn98.5Ag0.8Cu0.7	715	217/224	85 - 86	300 - 500
Sn99CuSP	401	227	85 - 86	300 - 500
Sn97Cu3	402	227/310	85 - 86	300 - 500
Sn43Bi57	301	139	85 - 86	300 - 500
Sn42Bi57Ag1	NA	139	85 - 86	300 - 500
Other : consult us				



TECHNICAL DATA

Category	Standard	Results
Activity Level (classification)	IPC J-STD-004	ROL0
Halide Content	IPC J-STD-004	Halide free (by titration)
Copper Mirror	IPC-TM-650 (2.3.32) /J-STD-004	Pass (no evidence of corrosion)
Silver Chromate	IPC-TM-650 (2.3.33)	Pass
Surface Insulation Resistance Test (SIR)	GR 78 Core Section 13, 13.1.3.2	Pass, 1×10^{12} ohms
Electromigration Resistance Testing	GR-78-Core Section 13.1.4	Pass, $>1 \times 10^{10}$ ohms
Visual aspect of residues	IPC-HDBK-005	Clear
Viscosity	Malcom spiral viscometer (J-STD-005)	370 Pa.s (SAC 305)
Solder ball test	IPC J-STD-005	Acceptable

DISPENSING

SIRIUS 1 LF Di has been designed for most types of solder paste dispensing machines equipped with needles down to 0.41 mm (using 25-45µm). Finer dispensing needles require lower size solder powder.

Ambient conditions

18-22°C and 35% to 70% RH. Minimize exposure of solder paste direct to air flow.

Cleaning Nozzles and Tools

Use MBO Easy Purge 400 conditioning fluid.



REFLOW

Heating Methods

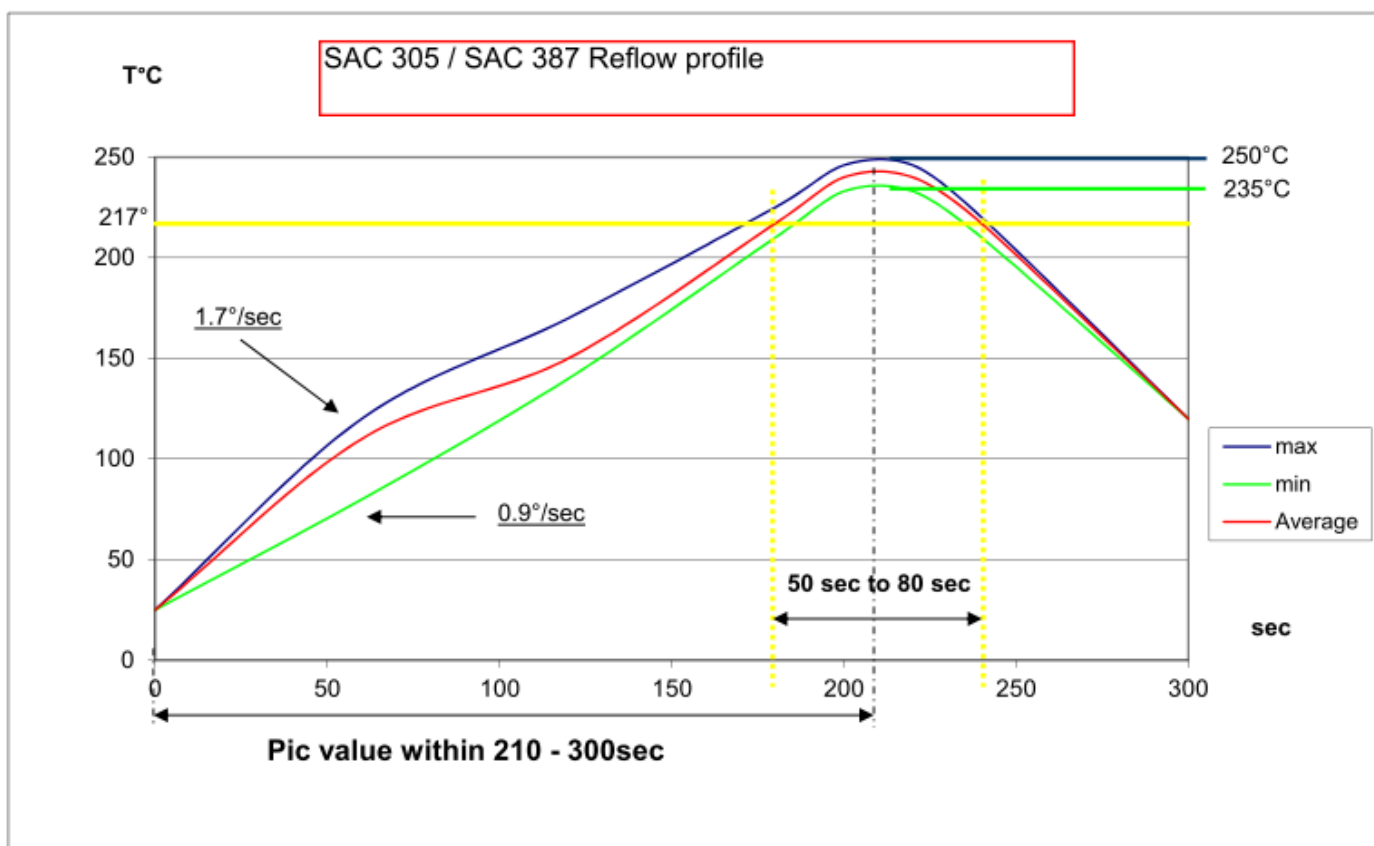
Convection, infrared, vapour phase, hot plate, hot bar, laser and others. Aerobic or inerted.

Heating Profile

See suggested reflow profile for specific alloy.

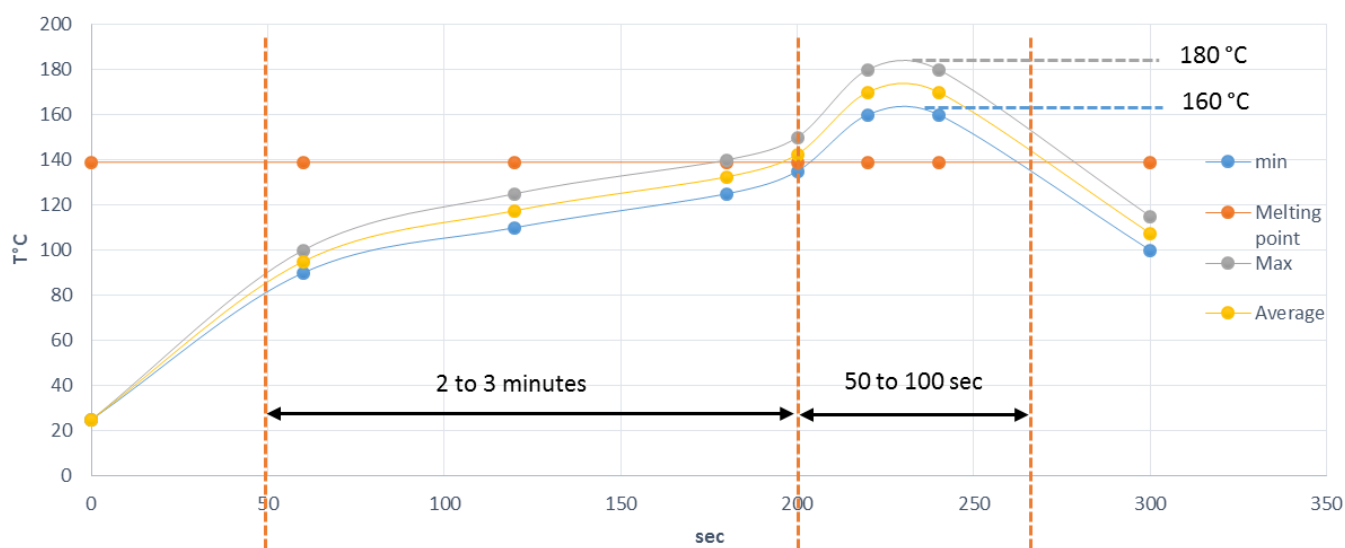
Cleaning Equipment

Spray, immersion, vapour degreaser or scrubber.





Sn42Bi57Ag1 / Sn42Bi57.6Ag0.4 / Sn43Bi57 reflow profile



STORAGE AND PACKAGING

Packaging: syringes and cartridges of 5cc, 10cc, 30cc and 50cc - others on request.

Storage: in original container between 5 and 10°C for up to 6 months. Wait until the syringe has reached the ambient temperature before using to avoid water condensation on the surface of the paste. Once opened if the syringe is emptied in 2-3 days, do not return to the fridge. Before using the syringe, it could be stored at ambient conditions (around 20 °C) within one week.

Additional information:

Our manufacturing processes have been subjected to FMECA analysis (equivalent of AMDEC in France).

We cannot anticipate any and all conditions and situations under which the information and our products or the combination of both with others will be used. We do not assume any liability in the safety and suitability of our products alone or in combination with others. Users must make their own tests to determine the safety and suitability of each product used alone or with other products for their own use. Except any previous written agreement, our products are sold without guarantee and customers must assume all liability for any loss or damage suffered by themselves or by third parties, either from handling or use of our products alone or with others. In case of any difference or variation seen during the use of the products we request that you contact our technical department.