Heraeus

Technical Data Sheet



ASSEMBLY MATERIALS

Product Type: No Clean Solder Paste

Product Name: F360 Ag3.5-89L25

Description

F360 Ag3.5-89L25 solder paste is a ready to use homogenous mixture, consisting of fully alloyed metal powders, binders, solvents and thixotropic agents for surface mount assembly applications. This paste provides excellent wetting and is capable of printing down to 12 mil pitch. F360 Ag3.5-89L25 solder paste is available for every application. It can be reflowed in air or N_2 and feature a low odour level. The printing capabilities of this paste is unsurpassed. The residues may be left on the board.

Key Benefits

- Outstanding wetting
- Exceptional print to print consistency
- Min, 8 hours tack and work life

Applications

- Printing

Product Code and Alloy

Product Code					Powder Properties		
Paste	Alloy	Metal Content	*Viscosity	Powder Type	Particle Size	Alloy	Melting Point
F360	Ag3.5	89%	L	2.5	25 – 75 µm	Sn96.5/Ag3.5	221 °C

*D = Dispense grade M = Print grade H = Print grade, high L = Dipping/Jetting grade, Low

Flux Activity

Activity Level (J-STD 004)	ISO 9454-1 [DIN EN 29454-1]	Bellcore GR-78-Core (Issue 1)	Classification
REL0	1.2.3.C	Passed	No Clean/ Solvent Clean

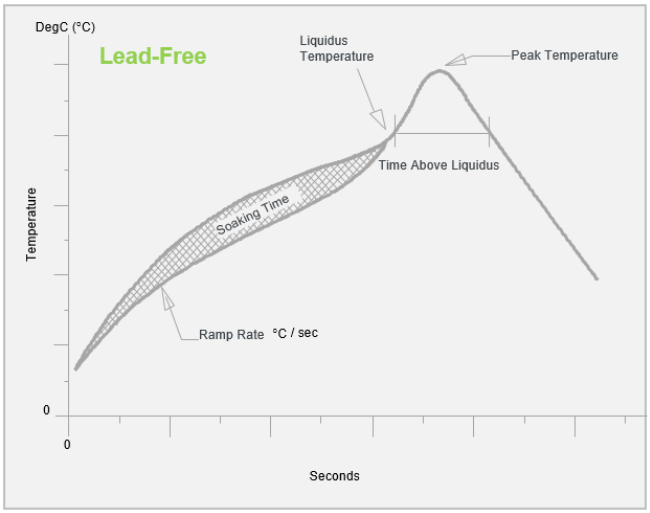
Halogen Content

Halogen-Zero (No halogen added in the flux)

Tolerances: Halogen < 50 ppm; measured according to BS EN 14582

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Recommended Reflow Profile



* Graph not drawn to scale

Recommended Profile	
Average Ramp Rate	**1 – 3 °C/s**
Peak Temperature	**15 °C (min) – 40 °C (max) above Melting Temperature**
Time above liquidus	**45 – 90 s**
Reflow Atmosphere Type 3 – 5	**Reflow in Air or in N_2 with < 2000 ppm O_2**

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application)

Cleaning Instructions

After reflow flux residues may remain on the circuit and do not need to be washed. For cleaning of wet paste or if desired for cleaning of flux residues Zestron and Vigon cleaners can be used – see separate cleaning recommendations.

Storage

- Store the solder paste in tightly-sealed containers and avoid exposure to sunlight and high humidity
- Max expiration date: please refer to the expiry date on the label of the packaged product
- Storage condition in the refrigerator at 2 - 10 °C
- Store cartridges with tip pointing downwards

Paste Preparation

- Remove paste from fridge: Before opening the package, leave paste for at least 4 hours (depending on jar/ cartridge size) at room temperature, so that paste warms up
- Do not open jar/cartridge while paste is cold to prevent condensation
- Do not heat the paste beyond room temperature
- Before using of paste jar: To obtain uniform, stable viscosity stir paste for 1 to 2 min, using a stainless steel or chemically resistive plastic spatula
- Caution: When automatic stirring equipment is used, do not stir the paste longer than 2 min

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