Microbond® SMT645

No Clean Solder Paste



Description

F645 SnSb5-88M30 solder paste is a state-of-the-art halogen-free lead free no clean solder paste that promotes wetting and minimizes soldering defects. Extensive testing at customer locations has proven this paste to be capable of defect-free performance in the production environment.

Key Features

- Exceptional print to print consistency
- Outstanding wetting



This picture does not show the packaging of PE645 and is solely intended for illustration purposes. The products are available in different packaging configurations and may change over time. Please refer to the latest safety data sheets for safety-relevant pictograms.

Paste Properties	
Product ID	F645 SnSb5-88M30
Paste	F645
Alloy	SnSb5
Compliant Products	Flux SF 64
Metal content (%)	88
Viscosity*	M
Application	Printing
Halogen content	Halogen zero (No halogen added in the flux)
Tolerances	Halogen < 50 ppm, measured according to BS EN 14582
Powder Properties	
Powder type	Type 3
Particle size (µm)	
Tartiere Size (pili)	25 – 45
Alloy	25 – 45 Sn95 / Sb5
·	
Alloy	Sn95 / Sb5
Alloy Melting point (°C)	Sn95 / Sb5
Alloy Melting point (°C) Flux Activity Activity level (J-STD-	Sn95 / Sb5 232 - 240 °C

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

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 particular application. The Heraeus logo, Heraeus, WelcoTM, Microbond@ and mAgic@, and the Welco, Microbond and mAgic figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.



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* Graph not drawn to scale

Average ramp rate (°C/s)	1 – 3
Peak temperature (°C)	15 (min) – 40 (max) above melting temperature
Time above liquidus (s)	60 – 120
Reflow atmosphere	Reflow in N ₂ and/or vacuum

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Cleaning Instruction

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.

Paste Preparation

- Remove paste from refrigerator: 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 paste jar: To obtain uniform, stable viscosity stir paste for 1 – 2 min, using stainless steel or chemically resistive plastic spatula
- For further information see Technical Information

Storage Conditions		
Storage temperature	2 – 10 °C	
Max expiration date	Refer expiry date on the label of the packaged product	
 Store the solder paste in tightly sealed containers and avoid exposure to sunlight and high humidity 		
Store cartridges with tip pointing downwards		

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