

ALPHA[®] WS-693CPS Solder Paste

Lead-Free, Water Soluble

DESCRIPTION

ALPHA WS-693CPS is a solder paste designed for stencil application in surface mount processes. Its optimized solvent system improves the rolling property and printability. Also, the tack life increases to more than two times compared to conventional solder paste.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- Halide free flux.
- Flux residues are cleanable with water.

PRODUCT INFORMATION

<u>Alloys:</u>	SAC305
<u>Powder Size:</u>	Type 4, Type 5
<u>Packaging Sizes:</u>	500 gram jars
<u>Flux Gel:</u>	Flux gel is available in 10 cc syringes for rework applications
<u>Lead Free:</u>	Complies with RoHS Directive 2011/65/EC

APPLICATION GUIDELINES

The flux residues can be cleaned with water. Ultrasonic cleaning is recommended for best results.

TECHNICAL DATA

Attribute	Result
Flux Classification	ORH0 (J-Std-004)
Fluoride Test (MIL-F-14256)	Pass
Silver chromate Paper Test (MIL-F-14256)	Pass
Spreading Test (JIS-Z-3197)	78% (@ 96.5Sn/3Ag/0.5Cu)
Tackiness Test (JIS-Z-3284 Appendix 9)	above 100gf(@8hours)
Migration Test (BCR TR-NWT-00078) Measuring Condition @85 °C,85%Rh Applied Voltage : 10VDC Measured Voltage: 100VDC Acceleration Time: 1008 hours Board: JIS 2 Type	1.0×10 ⁹ (After cleaning a board)

PROCESSING GUIDELINES

Cleaning

The flux residues can be cleaned with water. For the best results, Alpha Cleaner is recommended.

Please your local Alpha sales representative for the details.

Recommended Cleaner : Cleaner 2444A (Antalkali)

Cleaning Process:

Cleaning Bath #1 → Cleaning Bath #2 → Cleaning Bath #3 → Dry
(Room Temp., Spray) (50°C, Spray) (50°C, Rinse) (Air Blow)

Ultrasonic cleaning is recommended for the best results.

Handling Procedures

1. Store in a dark cool place. (0 to 10 °C)
2. The production environment should be 23 to 25 °C) and 40 to 60% relative humidity.
3. ALPHA WS-693CPS solder paste should be allowed to achieve room temperature before use.
4. Close the lid of the container every after work.
5. Do not use the dry portion. Remove the dry portion before use.
6. While ALPHA WS-693CPS solder paste contains no organic solvent designated by regulations, its use in typical reflow processes will generate a small amount of decomposition and vapors. Avoid skin contact and fume inhalation.
7. Shelf life is 3 months when it is stored in a refrigerator at 0 to 10 °C) provided the container remains sealed.

REFLOW

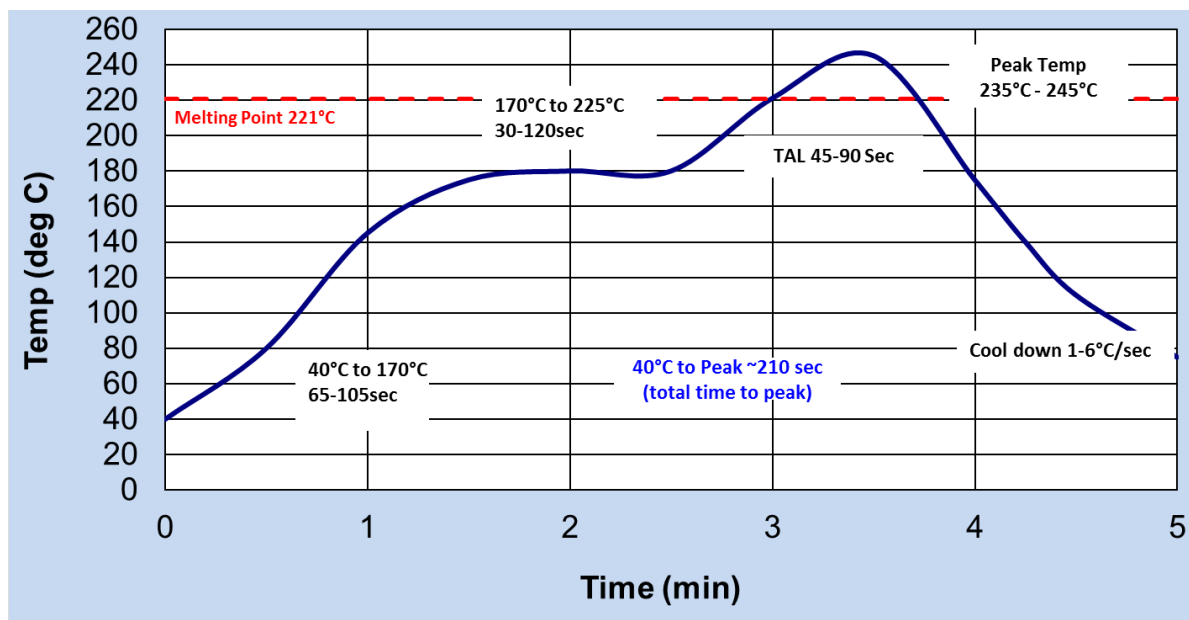


Figure 1 – SAC305 General Reflow Profile Recommendation

Please note that this is only a recommendation. Equipment and assembly factors may require adjustments to be made to the reflow profile.

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at MacdermidAlpha.com/assembly-solutions/knowledge-base.**

STORAGE

ALPHA WS-693CPS is shipped in thermally controlled boxes and should be refrigerated upon receipt at 32 to 50 °F (0 to 10 °C). ALPHA WS-693CPS should be permitted to reach room temperature before unsealing its package prior to use.

CONTACT INFORMATION

To confirm this document is the most recent version, please contact
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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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