

ALPHA[®] RMA 9154 Solder Paste

For Fine Pitch Stencil Printing

DESCRIPTION

ALPHA RMA 9154 is a solder paste designed for stencil printing in surface mount process. Its outstanding activation system reduces the occurrence of solder ball and improves wettability on OSP (Halide content: 800ppm). The carefully selected solvent system improves rolling properties and printability. It reduces heat slump and stable viscosity extends the life on stencil. The in-circuit property is excellent since the flux residues are only slightly left on the solder surface. The definition is consistent, even after downtime for one hour.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

ALPHA RMA 9154 is formulated for stencil printing application. Tack life is over 24 hours, although it depends on various conditions. Regarding metal content and viscosity, various specifications are available. Please contact Alpha for further details.

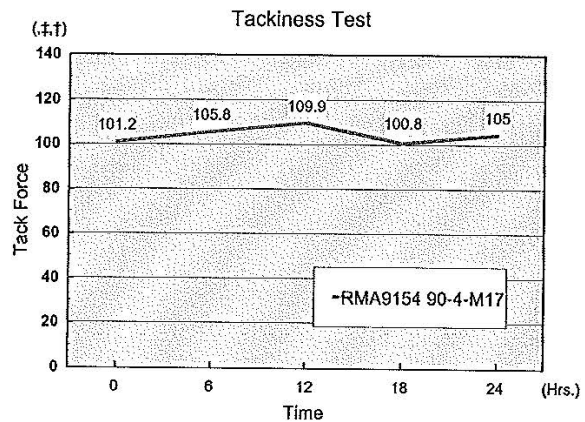
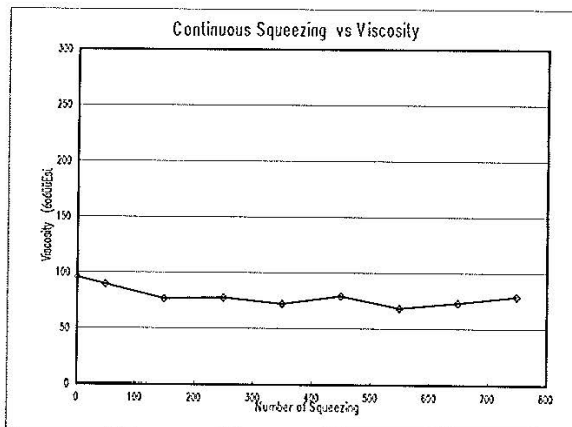
Application	Alloy Type	Metal Content
Stencil Printing	63Sn/37Pb 62Sn/36Pb/2Ag NT4S	90% 90.5%

NT4S is non-tombstone alloy type.

TECHNICAL DATA

Category	Results
Flux Properties	
Fluoride Test (MIL-F-14256)	Pass
Copper Mirror Corrosion Test (JIS Z 3197 6.6.2)	Pass
Silver chromate Paper Test (MIL-F-14256)	Pass
Spreading Test (JIS Z 3197)	94% (@63Sn/37Pb)
Heat Slump Test (JIS Z 3284 Appendix 8)	No Contact

Category	Results
Viscosity Test (JIS Z- 284 Appendix 8)	100 gf and above (@24hrs)
Solder Spec.	63Sn/37Pb 400 mesh 90wt%
Ion Migration Test (BCR TR-NWT-000078) Measurement Condition Environment Applied Voltage Measurement Voltage Acceleration Time	1.0x10 ⁹ 85/85% 10VDC 100VDC 1008 Hours
Board	JIS 2-type



PROCESSING GUIDELINES

Handling

1. Store in a dark cool place @ 0 to 10 °C.
2. Recommend operating the printer and the dispenser in the environment at 23 to 25°C and 40 to 60% relatively humidity.
3. Allow the paste to reach room temperature before use.
4. Close the lid of container at end of work or when stopping work for many hours.
5. Never use the dry portion of solder paste. Remove the dry portion before use.
6. ALPHA RMA 9154 contains no organic solvent designated by regulations. However, avoid fume inhalation and skin contact.
7. Shelf life is 4 months in a sealed container and refrigerated at 0 to 10°C.
8. Room temperature stability: 14 days at 25 °C for unopened containers.

REFLOW PROFILES

Reflow Example

Reflow of ALPHA RMA 9154 can be achieved with a variety of equipment including Infrared, Convection, Vapor Phase, Conductive Belt, or Hot Air. Since substrates and components come to thermal equilibrium based on surface area and mass, the following describe equilibrium temperatures measured at board level. A representative IR profile is given below.

Ramp Rate 1 to 3 °C/sec. to 120 to 160 °C

Soak 120 to 160 °C for 2 minutes

Ramp Rate 0.5 to 1 °C/second

Flux Residues

While the removal of flux residues is not required, Alpha Cleaner series are available. Please contact Alpha for details. (Ex. Bioact EC-7/7R Semi-aqueous Cleaner)

AVAILABILITY

ALPHA RMA 9154 is available in 500g/1 kg plastic jar.

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.**

CONTACT INFORMATION

To confirm this document is the most recent version, please contact
Assembly@MacDermidAlpha.com
www.macdermidalpha.com

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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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