

# ALPHA<sup>®</sup> RMA-390 DH4 LV Paste Flux

## Rosin Based ROL1 Paste Flux

### DESCRIPTION

**ALPHA RMA-390-DH4 LV** is a rosin-based paste flux designed for surface mount and other demanding electronic assembly applications. Because of its unique activator package and other special additives, **ALPHA RMA-390-DH4 LV** is suitable to remain on the circuit board without cleaning.

**ALPHA RMA-390-DH4 LV's** activator system enables the flux to penetrate even moderately tarnished surfaces among the following metals:

Silver	Copper	Solder (Creams)	Gold
Solder (Hot Dip)	Tin (Hot Dip)	Cadmium (Plate)	Tin (Plate)

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### PRODUCT INFORMATION

<u>Packaging Sizes:</u>	30cc syringe, 100 gram jar
<u>RoHS Compliance:</u>	RoHS Directive EU/2015/863; amending Annex II of 2011/65/EU

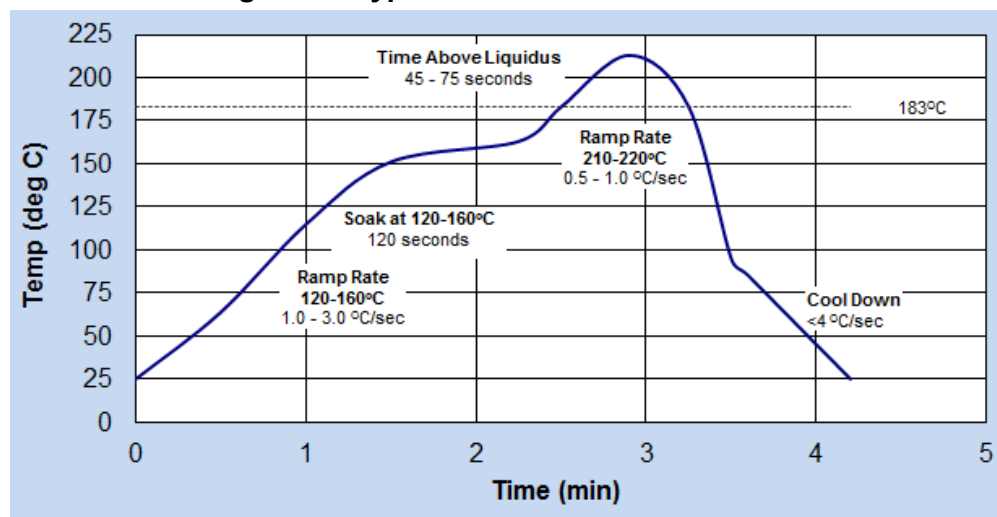
### APPLICATION GUIDELINES

ALPHA RMA-390-DH4 LV paste flux may be applied by screen printing or pin transfer (substrate) or doctor blade / dip coating (package). It can also be dispensed.

### TECHNICAL DATA

Category	Results	Procedure/Remarks
<b>Chemical Properties</b>		
Activity Level	ROL1	IPC J-STD-004
Cu Mirror Corrosion Test	<b>Pass (L)</b>	IPC J-STD-004
Halide Content	<b>&lt;0.05%</b>	By Titration

Electrical Properties		
SIR (IPC 7 days @ 85 °C/85% RH)	<b>Pass</b>	IPC J-STD-004 (Pass $\geq 1 \times 10^8$ ohm) uncleaned
Physical Properties		
Color	Smooth, Amber Paste	
Viscosity (5rpm at 25 °C by Malcom Viscometer)	110 to 400 Poise (typical)	
Fineness of Grind (um)	Typically, <10 $\mu$ m	

**REFLOW PROFILES**
**Figure 1: Typical 63Sn37Pb Reflow Profile**


Note: These are profiles that were tested in the lab with acceptable reflow and coalescence performance; optimization to each board application should still be carried out by users to ensure best results.

ALPHA RMA-390-DH4 LV can be safely left on the circuit board after reflow without cleaning. If cleaning is desired, most commercially available electronic assembly cleaning solvents are effective, including ALPHA 565. Flux residues are also removable by saponification with ALPHA 2110 in water.

**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](http://MacdermidAlpha.com/assembly-solutions/knowledge-base).**

**STORAGE**

The flux should be stored in sealed containers and need not be refrigerated. Shelf life of unopened containers at room temperature (19 to 25 °C / 66 to 77 °F) is 12 months from the manufacturing date. If the material has been chilled, the container should be allowed to reach room temperature before opening in order to prevent moisture condensation from ambient air onto the flux.

**CONTACT INFORMATION**

**To confirm this document is the most recent version, please contact  
 Assembly@MacDermidAlpha.com  
[www.macdermidalpha.com](http://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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