

# ALPHA<sup>®</sup> LR725 Paste Flux

## No-Clean Paste Flux

### DESCRIPTION

**ALPHA LR725** is a no-clean rosin-based flux designed for surface mount, flip chip, ball grid array (BGA) processes requiring reflow application together with the solder sphere/bump.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### APPLICATION GUIDELINES

ALPHA LR725 is best applied by stencil printing, screen printing or by dispensing.

ALPHA LR725 is designed with an activator system that enables the flux to penetrate even moderately tarnished surfaces among the following metals.

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

### PRODUCT INFORMATION

Packaging Sizes: 10cc syringe, 100-gram jar

RoHS Compliance: Complies with RoHS Directive EU/2015/863

**TECHNICAL DATA**

Category	Results
<b>Chemical Properties</b>	
Flux Classification	IPC-SF-818 : Type L3NC
	QQ-S-571E: RMA, mildly activated rosin
Halide Content	Halide free (by titration), Passes Ag Chromate Test
Corrosivity	Passes Cu Mirror Test
Water Extract Resistivity	>100,000 ohm-cm; RMA class
<b>Electrical Properties</b>	
SIR (ohms), IPC	Pass; > 5.0 x 10 <sup>9</sup> after 7 days, uncleaned
SIR (ohms), Bellcore	Pass; > 9.0 x 10 <sup>11</sup> after 4 days, uncleaned
Electromigration, Bellcore	Pass; > 5.0 x 10 <sup>9</sup> after 500 hours, uncleaned
<b>Physical Properties</b>	
Appearance	Smooth Paste
Residues	Approximately 5.5% by weight; light amber, tack free
Acid Number	71 to 81 mg KOH/g (typical)

**PROCESSING GUIDELINES**
**Cleaning**

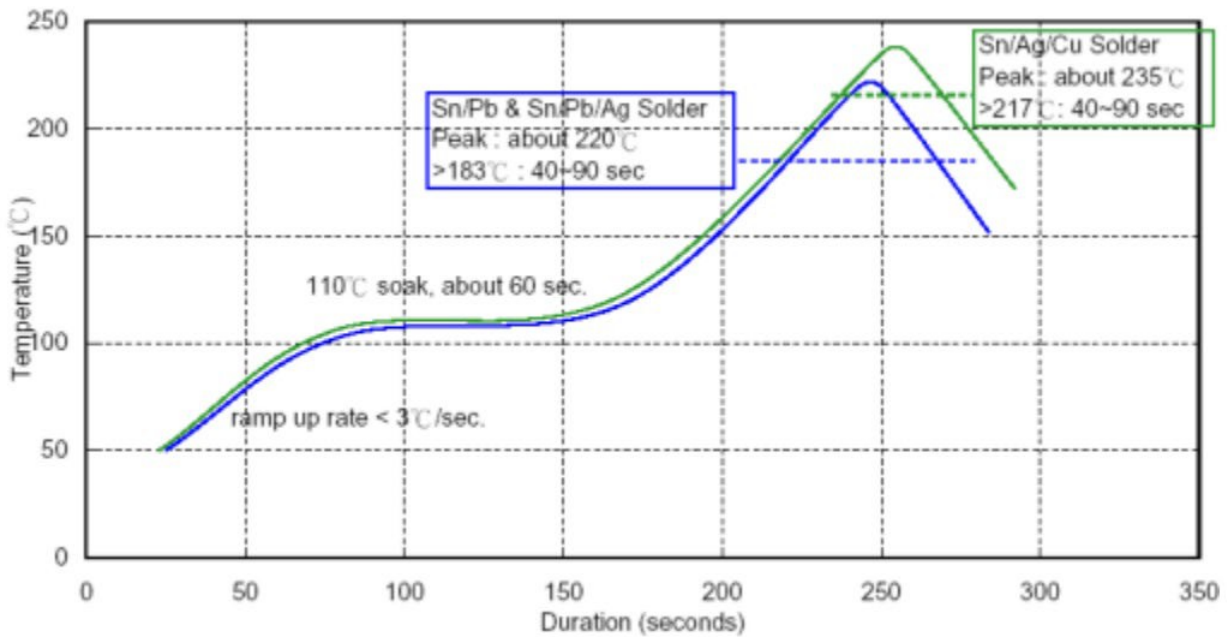
ALPHA LR725 is a no-clean flux and the residues are designed to remain on the board after reflow. If desired, ALPHA LR725 residues may be removed using semi-aqueous cleaners or by saponification process with ALPHA 2110 in water.

**REFLOW PROFILES**

*Note: These are only recommendations. Equipment and assembly factors may require adjustments to be made to the reflow profile*

ALPHA LR725 can be successfully reflow in infrared, convection or vapor phase systems.

**ALPHA LR725 Typical Soak Reflow Profile Recommendation**



**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**

ALPHA LR725 should be stored in sealed containers at room temperature (19 to 25 °C / 66 to 77 °F) and need not be refrigerated. Shelf life of unopened containers is nominally 6 months. 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](mailto:Assembly@MacDermidAlpha.com)**

[www.macdermidalpha.com](http://www.macdermidalpha.com)

<p><b>North America</b> 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460</p>	<p><b>Europe</b> Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400</p>	<p><b>Asia</b> 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100</p>
--	--	---

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

DISCLAIMER: All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement signed by officers of seller and manufacturer. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY IS MADE. The following warranty is made in lieu of such warranties and all other warranties, express, implied, or statutory. Products are warranted to be free from defects in material and workmanship at the time sold. The sole obligation of seller and manufacturer under this warranty shall be to replace any noncompliant product at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct, indirect, incidental or consequential, arising out of the inability to use the product. Notwithstanding the foregoing, if products are supplied in response to a customer request that specifies operating parameters beyond those stated above, or if products are used under conditions exceeding said parameters, the customer by acceptance or use thereof assumes all risk of product failure and of all direct, indirect, incidental and consequential damages that may result from use of the products under such conditions, and agrees to exonerate, indemnify, defend and hold harmless MacDermid, Incorporated and its affiliates therefrom. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manner that infringes any patent or other intellectual property rights, and seller and manufacturer assume no responsibility or liability for any such infringement.