

# ALPHA<sup>®</sup> OM-325 Paste Flux

No-Clean, Halide-Free

## DESCRIPTION

**ALPHA OM-325** is a no-clean paste flux designed for lead-free rework in micron-level fine feature printing and reflow applications. **ALPHA OM-325** has a wide reflow process window, even with high soak profiles (60 to 90 seconds at 180 to 190 °C) in both air and nitrogen atmosphere, delivering good soldering on Cu OSP and excellent post-reflow cosmetics.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

## FEATURES AND BENEFITS

- Wide reflow profile window allowing good solderability of complicated high-density PCB assemblies both in air and nitrogen reflow
- Excellent solderability enabling the process to handle the most difficult wetting requirements such as on palladium finishes and other lead-free PCB/components surface finishes
- Excellent solder and flux cosmetics after reflow soldering even with a long/high thermal soaking
- Excellent reliability properties, halide-free material graded ROL0 according to IPC J-STD-004 classification

## PRODUCT INFORMATION

Packaging Sizes: 100g Jar, 10cc Syringe

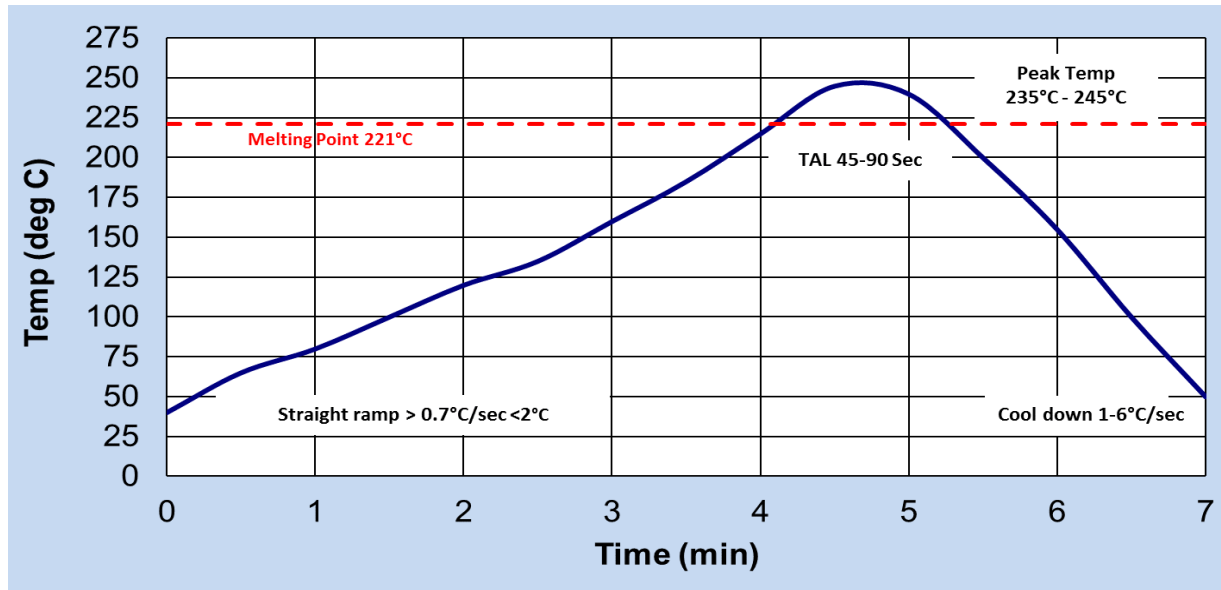
Lead-Free: RoHS Directive EU/2015/863; amending Annex II of 2011/65/EU

**TECHNICAL DATA**

Category	Results	Procedure/Remarks
<b>Chemical Properties</b>		
Activity Level	<b>ROLO</b>	IPC J-STD-004
Halide Content	<b>Halide free</b> (by titration)	IPC J-STD-004
Ag Chromate Test	<b>Pass</b>	IPC J-STD-004
Copper Mirror Test	<b>Pass</b>	IPC J-STD-004
Copper Corrosion Test	<b>Pass</b>	IPC J-STD-004
	<b>Pass</b>	JIS Z 3197:1986
Bono Corrosion Test	<b>Pass</b>	Bono test procedure
Talc Test	<b>Pass</b> (No powder attachment)	JIS Z 3197
<b>Electrical Properties</b>		
SIR (IPC, 7 days @ 85 °C /85% RH)	<b>Pass</b> , 2.2 x 10 <sup>10</sup> ohms	IPC J-STD-004 {Pass ≥ 1 x 10 <sup>8</sup> ohm min}
SIR (Bellcore, 96 hrs @ 35 °C/85% RH)	<b>Pass</b> , 9.5 x 10 <sup>11</sup> ohms	Bellcore GR-78 CORE {Pass ≥ 1 x 10 <sup>11</sup> ohm min}
SIR (JIS 168 hours @ 40 °C/93% RH)	>1.0 x 10 <sup>12</sup> ohms	JIS Z 3197 (No P/F limit)
Electromigration (Bellcore, 96 hours @ 65 °C/85% RH 10V 500 hours)	<b>Pass</b> , Initial = 2.0 x 10 <sup>10</sup> ohms Final = 1.8 x 10 <sup>10</sup> ohms	Bellcore GR-78 CORE {Pass = final > initial/10}
Electromigration (JIS, 1000 hours @ 85 °C/85% RH 48V 1000 hours)	<b>Pass</b> , Initial = 2.3 X 10 <sup>10</sup> ohms Final = 4.7 X 10 <sup>10</sup> ohms, <b>No migration after 1000hrs</b>	JIS Z 3197:1999
<b>Physical Properties</b>		
Color	Off-White to Pale Yellow Paste	
Viscosity (@10rpm at 25 °C by Malcom Viscometer)	150 to 230 Poise	

REFLOW PROFILES

Figure 1: Typical 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 the best results.

**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. The shelf life of unopened containers is 6 months from the manufacturing date. If the material has been chilled, the container should be allowed to reach room temperature before opening 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>
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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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