

ALPHA[®] OM-350 Paste Flux

No-Clean ROL0 Paste Flux

DESCRIPTION

ALPHA OM-350 is a no-clean paste flux suitable for demanding soak reflow profiles in air and nitrogen atmospheres. The wide reflow process window of **ALPHA OM-350** delivers good soldering on OSP-Cu, Immersion Ag, Immersion Sn, ENIG and Lead-Free HASL surface finishes.

ALPHA OM-350's compliance with ROL0 IPC ensures maximum long-term product reliability. Compliance to environmental standards, including RoHS allows global application of **ALPHA OM-350**.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- **Wide Reflow Profile Window:** allows best quality solderability of complicated, high-density PWB assemblies in both air and nitrogen reflow, using straight ramp or soak profiles up to 200 °C
- **Robust Solderability:** proven to handle difficult wetting requirements of critical lead-free components, such as CSP and QFN, etc. on a variety of lead-free board finishes, OSP-Cu, Immersion Ag, Immersion Sn, ENIG & LF HASL
- **Excellent Solder Joint and Flux Residue Cosmetics:** after reflow soldering even using long/high thermal soaking without charring or burning
- **First-rate Reliability Properties:** excess variety of industry and customer standards, halide free material graded ROL0 according to IPC classification
- **Safe and Environmentally Friendly:** materials comply with RoHS requirement, as well as TSCA & EINECS

PRODUCT INFORMATION

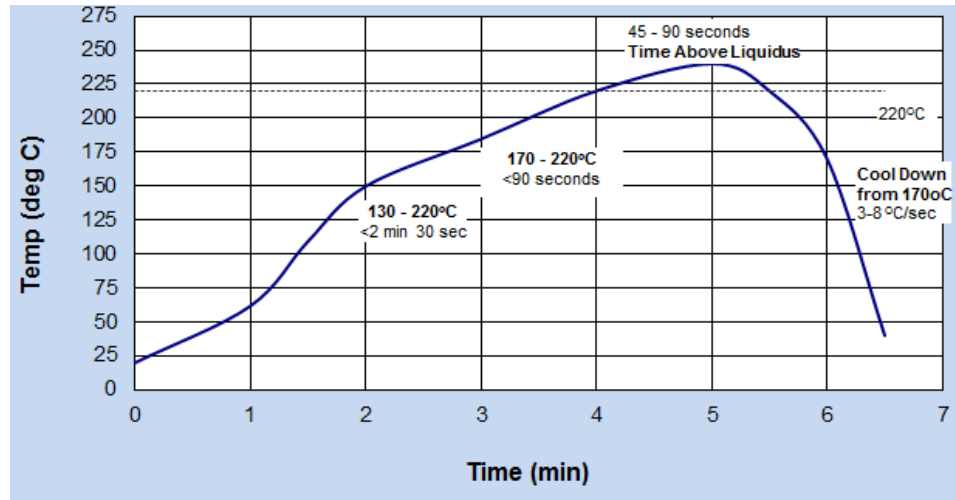
Packaging Sizes: 30cc syringe, 100 gram jar

APPLICATION GUIDELINES

ALPHA OM-350 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
Chemical Properties		
Activity Level	ROLO	IPC J-STD-004
Halide Content	Halide free (by titration)	IPC J-STD-004
Ag Chromate Test	Pass	IPC J-STD-004
Electrical Properties		
SIR (IPC 7 days @ 85 °C/85% RH)	Pass , 1.8×10^{10} ohms	IPC J-STD-004 (Pass $\geq 1 \times 10^8$ ohm) uncleaned
SIR (Bellcore 96 hrs @ 35 °C/85%RH)	Pass , 1.9×10^{12} ohms	Bellcore GR78-CORE (Pass $\geq 1 \times 10^{11}$ ohm)
IPC/Bellcore electromigration (Bellcore 96 hrs @ 5 °C/85%RH 10V 500 hrs)	Pass , Initial = 7.8×10^8 ohms Final = 8.2×10^9 ohms	Bellcore GR78-CORE (Pass = final > initial/10)
JIS Electromigration (1000 hrs @ 5 °C/85%RH 48V 1000 hrs)	Pass , Final Reading > 1.0×10^{10} ohms No migration after 1000 hrs	JIS-Z-3197-1999
Physical Properties		
Color	Smooth, Off-White to Pale Yellow Paste	
Viscosity (10rpm at 25 °C by Malcom Viscometer)	180 to 300 Poise	
Fineness of Grind (um)	Typically, <10 μ m	

REFLOW PROFILES
Figure 1: Typical SAC Alloy Reflow Profiles


Note: This profile was 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.

Should cleaning be required, refer to the recommended cleaning guidelines below or consult your Alpha Technical support for detailed application conditions.

Parameter	Guidelines	Additional Information
Removing Reflow Residues	<ul style="list-style-type: none"> ALPHA BC-2400 and ALPHA BC-2200 Aquanox A4520 and A4630 (Kyzen) ALPHA WS2104, ALPHA WS2107, ALPHA WS1942, ALPHA WS1863 ATRON® AC 205 (Zestron) 	Aqueous Cleaning
	<ul style="list-style-type: none"> ALPHA BC-3300 VIGON® A 200 (Zestron) 	Ultrasonic Semi-aqueous Cleaning
	<ul style="list-style-type: none"> ALPHA SM-110, ALPHA SM-110E 	Manual

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

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 6 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**

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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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