

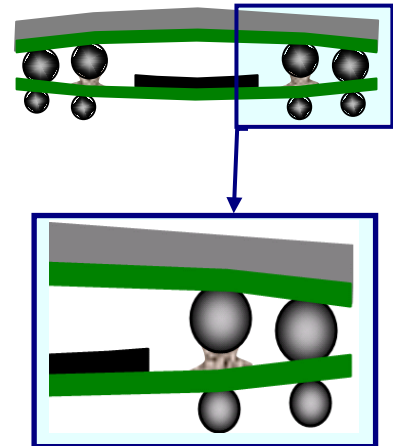
# ALPHA<sup>®</sup> POP33 PASTE FLUX

No Clean, Zero Halogen, Paste Flux for Package on Package Assembly

## DESCRIPTION

To meet the demand of high-density and memory/logic options for sophisticated electronic devices, many assemblers are evaluating package on package (PoP) technology. PoP assemblies allow for higher electronic functionality per unit circuit board area, and allows low cost product memory customization, and highly flexible manufacturing.

**ALPHA PoP33 Paste Flux** was designed to minimize expensive rework and scrap by providing highly repeatable paste flux volumes to BGA memory packages. **ALPHA PoP33** maintains its rheology, even under frequent exposure to high shear, for 24 hours. This means highly reproducible volumes of paste flux pick up in normal PoP dipping applications, reducing defects, increasing yields, and reducing scrap. **ALPHA PoP33** is a no-clean lead-free paste flux.



READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

## PRODUCT INFORMATION

Packaging: 100 gram jars, 10g & 30g syringes

## TECHNICAL DATA

Category	Result	Procedure/Remarks
<b>Chemical Properties</b>		
Activity Level	ROL0 = J-STD Classification	IPC J-STD-004
Halide Content	Halide free (by titration & IC)	IPC J-STD-004
Halogen Content	Zero halogen,	EN-14582-B Oxygen Bomb, IC IPC J-STD-004
Ag Chromate Test	No halogen intentionally added PASS	
Copper Corrosion Test	PASS	IPC J-STD-004
	PASS	JIS Z 3197-1986

Category	Result	Procedure/Remarks
Talc Test	PASS	JIS Z 3197
<b>Electrical Properties</b>		
IPC SIR (7 days @ 40 °C/90% RH, 12V)	>1.8 x 10 <sup>8</sup> ohms PASS, Electrical and Visual requirements	IPC J-STD-004B, IPC-TM-650 (2.6.3.7) (Pass ≥ 1 x 10 <sup>8</sup> ohm min)
Bellcore SIR (96 hours @ 35 °C/85%RH)	9.8 x 10 <sup>12</sup> ohms PASS, Electrical and Visual requirements	Bellcore GR78-CORE (Pass ≥ 1 x 10 <sup>11</sup> ohm min)
JIS SIR (7 days, 100V)	PASS Initial (Ambient): 1.1 x 10 <sup>13</sup> ohms After 7 days: 4.9 x 10 <sup>10</sup> ohms Recovered: 7.2 x 10 <sup>12</sup> ohms	JIS-Z-3197-1999

## PROCESSING GUIDELINES

### Storage & Handling

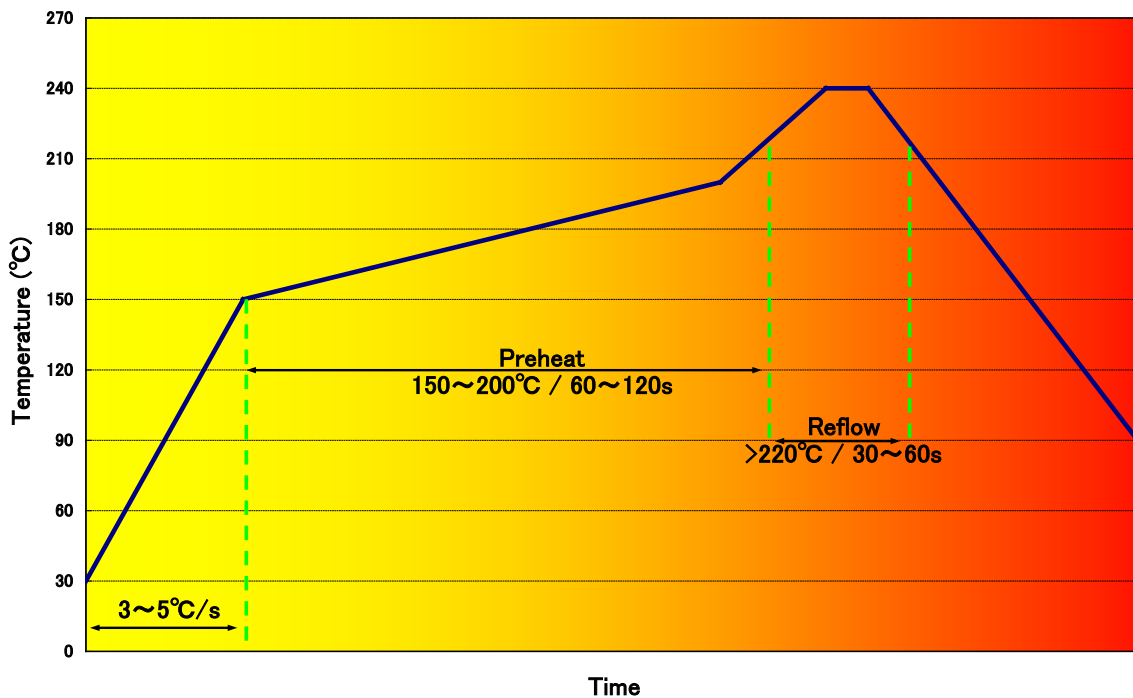
ALPHA PoP33 paste flux should be stored in sealed containers and need not be refrigerated. The shelf life of unopened containers at room temperature (19 to 25 °C / 66 to 77 °F) is up to 12 months from the manufacturing date. If the material has been exposed to lower temperatures, the containers should be allowed to reach room temperature before opening to prevent moisture condensation from ambient air onto the flux.

Paste flux must be ≥ (19 °C/66 °F) before processing. Verify paste temperature with a thermometer to ensure paste is (19 °C/66 °F) or greater before set-up.

ALPHA PoP33 paste flux has a working range of 19 to 28 °C, 30 to 70%RH.

**REFLOW PROFILE**

<b>Atmosphere</b>	N <sub>2</sub> 100ppm and below for pre-stack Air reflow for On-board-stack
<b>Ramp Rate</b>	3 to 5 °C/sec
<b>Preheat</b>	150 to 200 °C, 60 to 120 sec
<b>TAL for Reflow</b>	220 °C and above for 30 to 60sec.
<b>Peak Temperature</b>	240 to 250 °C


**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).**

**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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