

ALPHA[®] WS362-25

Water-Soluble Surface Mount Flux

DESCRIPTION

ALPHA WS362-25 is a halide-free, water-soluble, organic flux designed for the soldering of surface mount and mixed technology assemblies, where the effective cleaning of residues becomes most critical. The densely-packed assemblies, associated with today's mixed technology boards, adds a difficulty to cleaning which makes the older technology water-soluble fluxes non-optimal for applications requiring high ionic cleanliness.

ALPHA WS362-25 is recommended where maximum flux activity and solids are required, such as the soldering of assemblies with very dense component packing and with multilayer boards requiring relatively high preheat temperatures. After soldering, flux residues are highly water soluble and can be readily removed. This results in assemblies with the highest degree of ionic cleanliness and high surface insulation resistance.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- Most cleanable water-soluble flux; Highest ionic cleanliness and surface insulation resistance
- Halide-free; Maximum electrical integrity
- Good activity with rapid wetting; Defect-free soldering

APPLICATION GUIDELINES

ALPHA WS362-25 flux can be applied by foam, spray or wave techniques. The recommended topside preheat temperatures are 82 to 104 °C (180 to 220 °F).

Post soldering flux residues should be removed as soon as possible and should not exceed 8 hours after soldering. Any longer amount of time can result in etching of the joints due to the very high activity level of the flux. Thorough cleaning can be accomplished with 50 to 75 °C (120 to 170 °F) water. For critical cleanliness requirements, final rinsing with DI water may be required.

TECHNICAL DATA

Property	Typical Values	Property	Typical Values
Appearance	Clear, pale yellow	Flash Point (T.C.C.)	17 °C
Solids Content, wt/wt	25%	pH of 5% Aqueous Solution	3.2
Specific Gravity @ 25 °C (77 °F)	0.846 +/- 0.005	Recommended Thinner	ALPHA 425
Acid Number (mg KOH/g)	33.00 +/- 2.00	Shelf Life (from Date of Mfg.)	540 days
Packaging	1, 5, 55 gallons	IPC J-STD-004 Designation	ORMO

ELECTRICAL TESTING
IPC-J-STD-004 Surface Insulation Resistance (All values shown are in ohms)

Test	Conditions	Requirements	Results
"Comb-Down" Hydrocleaned	85 °C/85% RH, 7 days	$> 1.0 \times 10^8$	4.4×10^8
Control Boards	85 °C/85% RH, 7 days	$>1.0 \times 10^9$	3.6×10^9
IPC Test Condition (per J-STD-004): --50V, measurement @ 100V/IPC B-24 board (0.4 mm lines, 0.5 mm spacing).			

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.**

CONTACT INFORMATION

To confirm this document is the most recent version, please contact
Assembly@MacDermidAlpha.com
www.macdermidalpha.com

<p>North America 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460</p>	<p>Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400</p>	<p>Asia 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.

© 2019 MacDermid, Inc. and its group of companies. All rights reserved. "R" and "TM" are registered trademarks or trademarks of MacDermid, Inc. and its group of companies in the United States and/or other countries.