



ALPHA® 856

Neutral OA Water Soluble Flux

DESCRIPTION

ALPHA 856 is formulated for defect-free soldering in processes employing water cleaning. It has a buffered activation system containing no free acid and has a neutral pH. Its post-soldering residues are also non-acidic.

ALPHA 856 is a low-smoking, efficient foam flux. Using moderate air flow rates, its fine-bubble foam head is fast breaking and recovers rapidly for effective coverage at high production speeds. This highly active flux will produce bright, shiny connections, even if cleaning is delayed for a couple of hours. Flux residues remain water soluble, and no corrosion products are visible.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

Thinning: The consistency of ALPHA 856 should be maintained by the addition of thinner to compensate for evaporation losses. It is recommended that the specific gravity @ 25 °C / 77 °F be maintained between 0.822 and 0.842 by the addition of thinner. Only ALPHA 425 thinner should be used for this purpose to ensure consistency of flux foaming and soldering characteristics

Residue Removal: Cleanliness of PCBAs processed with ALPHA 856 show good efficiency with hot DI water temperature set at 35 to 40 °C; for extended range the max temperature is \sim 60 °C. It is mandatory to rinse with hot DI water temperature set at 50 to 60 °C to get very low level of ionic contamination and reduce Δ T followed by drying step in oven. The flux is formulated so that the cleaning process water effluent is completely biodegradable. To avoid the risk of corrosion, residues should be thoroughly cleaned, preferably, immediately or not beyond four hours after processing.

The water effluent is neutral, eliminating the need for pH adjustment prior to disposal. However, local regulations may require pretreatment to remove dissolved lead from the water effluent.





TECHNICAL DATA SHEET

TECHNICAL DATA

Item	Typical Values	Item	Typical Values
Appearance	Colorless to Pale Yellow Liquid	Flash Point (T.C.C.)	17 °C (62 °F)
Specific Gravity @ 25 °C (77 °F)	0.832 ± 0.005	Shelf Life (from Date of Mfg.)	720 days
% Non-volatiles	15	IPC J-STD-004 Designation	ORH1
pH (5% Solution)	6.6	Packaging Size	1, 5, and 55 gallons
% Halide (as Chloride)	2.33 ± 0.23		

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.





TECHNICAL DATA SHEET

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.**

CONTACT INFORMATION

www.macdermidalpha.com

North America 140 Centennial Avenue Piscataway, NJ 08854 1.800.367.5460

EuropeUnit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400

8/F., Two Sky Parc 51 Hung To Road Kwun Tong, Kowloon, Hong Kong, SAR China 852.2500.5365

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 (SI MADE. The following warrantly 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.



