

# **ALPHA® K183**

Halide-Free, Water Soluble Flux

### **DESCRIPTION**

**ALPHA K183** is a highly active, halide-free, water soluble organic flux especially designed to give excellent solder wetting with Kovar, ALLOY 42, Nickel and Copper surfaces. The residues from **ALPHA K183** can be cleaned to low levels of ionic contamination.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

#### **APPLICATION GUIDELINES**

ALPHA K183 is recommended for automatic wave soldering applications where there is a concern about the presences of halide activator in the flux. This concern may arise from the possibility of either flux penetrating micro-cracks in component seals, or flux entrapment underneath or in open or porous cavities of components.

ALPHA K183 can be used both as a flux for waver soldering printed circuit assemblies, as well as for tinning lead frames or component leads.

Flux Application: ALPHA K183 can be applied by foam, wave, dip or spray techniques.

**Thinning:** The non-volatile content of ALPHA K183 should be maintained by the addition of thinner to compensate for evaporation losses. ALPHA 425 Thinner is recommended for the ALPHA K183 Flux.

**Residue Removal:** Residues from the ALPHA K183 Flux should be removed after soldering as soon as possible. Thorough cleaning of these residues can be accomplished with warm to hot water. For critical cleanliness requirements, final rinsing with DI water may be required.

### **TECHNICAL DATA**

Item	Typical Values	Item	Typical Values
Appearance	Clear, pale yellow liquid	Flash Point (T.C.C.)	12 °C
Non-Volatile Content, %wt/wt	18	Recommended Thinner	ALPHA 425







Item	Typical Values	Item	Typical Values
Specific Gravity @ 25 °C (77 °F)	0.865 ± 0.005	Shelf Life (from Date of Mfg.)	540 Days
pH, 5% aqueous	2.8	IPC J-STD-004 Designation	ORH0
Total Halides	10ppm max	Packaging Size	1, 5 & 55 Gallons

### **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

North America 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460	Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400	Asia 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100
---	--	---

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

