

ALPHA[®] 100

Non-Activated Rosin Flux (Type R)

DESCRIPTION

ALPHA 100 Flux is a solution of pure water-white rosin in alcohol, meeting the requirements of Type R of MIL-F-14256D, designated as “Flux Soldering, Liquid (Rosin Base)”. This flux contains no activator additives, making this the least corrosive type of rosin flux available.

PRODUCT INFORMATION

ALPHA 100 Rosin Flux contains P.C. Rosin – a quality grade of water-white rosin that meets the requirements of Class A of Type 1, Grade WW of Federal Specification LLL-R-626. Use of P.C. Rosin insures a flux of maximum clarity, light color and consistent performance.

APPLICATION GUIDELINES

ALPHA 100 can be used on critical electronics assemblies where current leakage is extremely sensitive and where flux residue removal is not feasible.

This flux is often used to test the solderability of bare boards and component leads, as an incoming QC tool.

ALPHA 100 is suitable for use on the following metals, provided the surfaces are not heavily tarnished:

| | | | |
|-----------------|------------------|--------------------------|--------------------|
| Cadmium (Plate) | Copper | Gold | Silver |
| Solder (Plate) | Tin (Hot Dipped) | Tin Plate (Electrolytic) | Tin / Zinc (Plate) |
| Terne (Plate) | | | |

Flux Application: ALPHA 100 may be applied by brushing, dipping, spraying or any conventional method.

Control: During use, most fluxes tend to thicken and become viscous because of solvent evaporation. For consistent results, it is recommended that evaporation losses be replenished by the addition of **ALPHA 411** Thinner until the proper specific gravity is obtained. The specific gravity can be determined by using a hydrometer (taking into consideration the flux temperature).

Residue Removal: Flux residues are non-conductive and non-hygroscopic and are, therefore, considered to be non-corrosive. While it is recommended that flux residues be removed after soldering for critical assemblies, no corrosion or current leakage will occur if some residues remain.

For effective removal of flux residues, **ALPHA 2100** can be used for aqueous cleaning systems.

TECHNICAL DATA

| Item | Typical Values | Item | Typical Values |
|----------------------------------|------------------|-------------------------------------|------------------|
| Appearance | Amber Liquid | Flash Point (T.C.C.) | 20 °C (68 °F) |
| Solids Content, wt/wt | 40% | Recommended Thinner | ALPHA 411 |
| Specific Gravity @ 25 °C (77 °F) | 0.898 ± 0.005 | Shelf Life (from Date of Mfg.) | 1080 days |
| Water Extract Resistivity | 300,000 ohm-cm | IPC J-STD-004 Classification | ROLO |
| Fungus Resistance | Per MIL-E-5272 | DIN EN ISO 61190-1-1 Classification | 1.1.1 |
| Packaging Size | 1, 5, 55 gallons | DIN EN ISO 9454-1 Classification | 1.1.1 |

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.