

# ALPHA<sup>®</sup> 5003

## Microelectronic Grade Rosin Flux (Type R)

### DESCRIPTION

**ALPHA 5003** Flux is a solution of high-purity modified rosin in inert solvents. This non-spattering, low fuming flux is specifically formulated for microelectronic applications. **ALPHA 5003** promotes wetting and retards the scavenging of thick and thin film deposits by the solder. This non-activated flux is preferred for high-temperature soldering since its vehicle is high boiling solvents.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### APPLICATION GUIDELINES

ALPHA 5003 is recommended for use on all solderable surfaces, such as on gold and copper thin films and thick film materials including palladium/gold, gold, palladium/silver and copper. Substrate soldering, lead attachment and hermetic sealing are some of the end applications.

In addition, the flux is effective on the following metals, provided the surfaces are not excessively passivated:

Cadmium (Plate)	Solder (Plate)	Tin (Hot Dipped)
Tin Plate (Electrolytic)	Tin/Zinc (Plate)	Terne (Plate)

**Flux Application:** ALPHA 5003 can be applied by brushing, dipping, spraying or by other conventional methods.

**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 residue, ALPHA 2100 can be used with aqueous cleaning systems.

**TECHNICAL DATA**

Item	Typical Values	Item	Typical Values
Solids Content, %wt/wt	67 ± 2%	Flash Point (COC)	101 °C (214 °F)
Specific Gravity @ 25 °C (77 °F)	1.060 ± 0.020	Shelf Life (from Date of Mfg.)	1080 days
Free Acidity, Halides	None	IPC J-STD-004 Designation	ROL0
Viscosity @ 25 °C (77 °F), cps	1500	Packaging Size	1 gallon

**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**

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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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