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TECHNICAL BULLETIN

# ALPHA® 90

## Water Soluble Inorganic Acid Flux

## DESCRIPTION

**ALPHA 90** is a strong, highly active water-soluble inorganic acid flux for use on stainless steel and other difficult-to-solder metals. This flux is not normally used in electronic applications. It is ideal for the soldering of light-gauge materials without buckling or discoloration because of the low temperature at which it becomes active.

Efficient wetting agents assure rapid, uniform penetration of flux into all areas. **ALPHA 90** Flux is buffered by salts so that the residues after soldering are readily soluble in water and less corrosive than residues of conventional “acid” fluxes. A high concentration of active fluxing agents reduces spattering to a minimum.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

## APPLICATION GUIDELINES

**Flux Application:** ALPHA 90 is used in dip soldering of cans, hard-wave, and similar articles, using torch, iron, oven, resistance, and induction heating.

ALPHA 90 Flux is ideally suited for soldering the following materials:

| | | |
|---|---|---|
| Beryllium-Copper | Galvanized Iron | Solder (Plate) |
| Brass | Lead | Steel/Stainless |
| Bronze | Nickel (Plate) | Steel |
| Chromium | Nickel-Iron | Terne (Plate) |
| Copper | Silicon-Bronze | Tin |
| | Silver | Tin-Nickel |

**Thinning:** ALPHA 90 is carefully balanced for best results, and will not require thinning with water under normal usage.

**Residue Removal:** The post-soldering residues of ALPHA 90 is corrosive and must be removed from the assembly promptly. The flux residues are most effectively removed by rinsing with a 1% solution of hydrochloric acid, followed by a water rinse.

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## TECHNICAL DATA

| Item | Typical Values | Item | Typical Values |
|---|---|---|---|
| Appearance | Yellow to Amber Liquid | Flash Point | None |
| Specific Gravity @ 25 °C (77 °F) | 1.32 ± 0.01 | Shelf Life (from Date of Mfg.) | 1080 Days |
| Lb./Gal. at 25 °C (77 °F) | 11.0 | 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.



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## 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

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

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