

ALPHA[®] 564FE

Chlorinated Cleaning Solvent

DESCRIPTION

ALPHA 564FE is functionally an azeotropic blend of a chlorinated solvent and a polar component, designed for effective cleaning of post-soldering flux residues from PCBs and other electronic assemblies. It has no flash point. Compared to the fluorocarbons, it is more aggressive, more effective, yet lower in cost.

The non-polar chlorinated solvent component of **ALPHA 564FE** is effective for removing non-ionic soils such as rosin or resin flux residues and soldering oils from PCBs. The polar component is effective for dissolving ionic soils such as flux activators which, if not removed, can cause current leakage and corrosion under adverse environmental conditions.

The low evaporation rate of **ALPHA 564FE** results in minimal solvent consumption. In addition, it can be efficiently reclaimed by distillation, is non-flammable by all of the common methods of flash point measurement, is readily capable of maintenance below TLV concentration to meet OSHA requirements.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

Best for cold cleaning, utilizing immersion techniques where possible, and wave or bottom-brush equipment restricting the cleaning to the bottom side of PCBs (solvent-sensitive plastics) when required.

While most printed circuit boards, component materials, and markings are not affected by normal exposure to ALPHA 564FE certain plastics are, such as polystyrene and polycarbonates. It is recommended that component compatibility be verified prior to use.

TECHNICAL DATA

Category	Results
Specific Gravity	1.540 ± 0.010
Lb./Gal.	12.81
Residue on Evaporation (ppm max.)	25
Alkalinity (calculated as ppm NaOH)	50
Acid Acceptance	None
Appearance	Clear, Colorless Liquid
Boiling Point	> 35 °C (> 95 °F)
Freezing Point	< 0 °C (< -18 °F)
Vapor Density at Boiling Point (1b./cu. Ft) ²	0.307
Latent Heat of Vaporization at Boiling Point (Btu/lb.) ²	100
Specific Heat (Btu/lb./°F) ²	0.244
Vapor Pressure (mm Hg) ² @ 20°C	14.0
Kauri-Butanol Value ³	90
Evaporation Rate (relative) ⁴	0.21
Solubility of Water in Solvent (grams/100 cc)	< 0.1
Toxicity (TLV) ²	100
Flash Point (Tag Closed Cup)	> 93 °C (> 199.4 °F) [Pensky-Martens.]
Fire Point	None

Notes:

1. Unless specified, properties are room temperature (25 °C ; 77 °F) and 1 atmosphere (770 mm Hg).
2. Calculated values
3. Major constituent only
4. Relative evaporation rate calculated with a value of 1.00 assigned to F113.

AVAILABILITY

ALPHA 564FE is available in 5 gallon containers.

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
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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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