

ALPHA[®] 520

Aqueous Cleaner

DESCRIPTION

ALPHA 520 cleaner is an aqueous concentrate formulated to readily remove rosin flux residues from printed circuit boards, assemblies, components and hardware. **ALPHA 520** cleaner works with a co-solvency action of alkaline saponification and solvent solubilization. Removal of water soluble organic acid flux residues is facilitated by **ALPHA 520** cleaner's neutralizing and wetting properties.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

ALPHA 520 cleaner is suitable for in-line spray cleaning systems, batch soak tanks and modified dishwashers.

Suggested Process Parameters:

Residue	Machine Type	Concentration Range	Temperature Range
Rosin	Conveyorized	5 to 10%	120 to 130 °F / 49 to 54 °C
Rosin	Dishwasher	5 to 10%	120 to 130 °F / 49 to 54 °C
Organic Acid (OA)	Conveyorized	2 to 5%	120 to 130 °F / 49 to 54 °C
Rosin / OA	Soak Tank	5 to 10%	Ambient to 130 °F / 54 °C

Thorough rinsing is vital for removing flux residues solubilized by the ALPHA 520 wash. Levels of cleanliness are affected by the condition and flow rate of rinse water. Multistage spray rinsing is recommended.

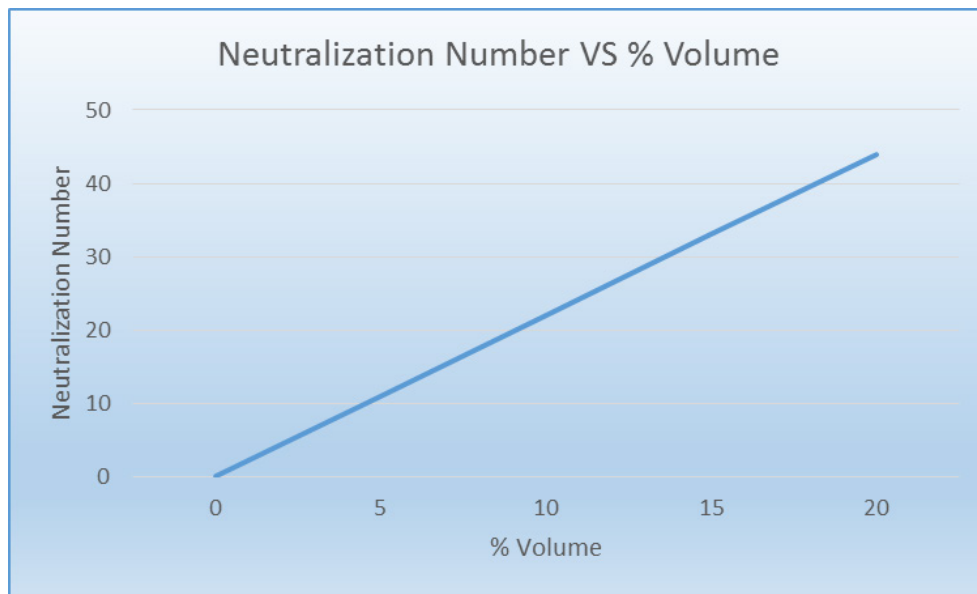
Prior to heat drying assemblies, using an air knife to remove excess water will facilitate force drying and enhance final ionic cleanliness. Cleanliness levels can be measured with a ZERO IONTM ionic contamination system.

Control: In automated systems, the concentration of ALPHA 520 cleaner in the wash tank will be diminished by ongoing flux removal and diluted by automatic water additions replacing drag-out.

Bath strength should be replenished with periodic additions or continuous metering of ALPHA 520 into the wash tank. Monitoring bath concentration is recommended using a standard alkaline titration procedure with an ALPHA 520 Titration Kit. For details on this kit, request the data sheet for kit No. EQ080.

After 8 to 16 hours of continuous use, the wash solution will become saturated with rosin soap and should be changed.

Equipment Maintenance: Aqueous cleaning equipment will accumulate mineral deposits, commonly referred to as “Scale” from using tap water. Periodic descaling with Mach 73 will assist in maintaining washing efficiency of equipment.



TECHNICAL DATA

Item	Typical Values	Item	Typical Values
Appearance	Clear Colorless Liquid	pH 100%	12.5
Specific Gravity	0.977 ± 0.005	Shelf Life	540 days
Weight/gallon	8.14 pounds	Flash Point, °F	230 °F
Alkalinity, %wt NaOH	23.6 to 24.6	Neutralization Value	218

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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