

ALPHA[®] 926, 2002D, 2007, 2444

Miscellaneous Products for Aqueous Processing

DESCRIPTION

ALPHA 926 SCALE REMOVER: A biodegradable formulation for the removal of mineral deposits frequently seen when using “hard” water in aqueous cleaning equipment. ALPHA 926 works by dissolving and sequestering calcium, magnesium and iron carbonates and oxide scale.

ALPHA 2002D DEFOAMER: This product reduces excessive foam in aqueous systems, including alkaline cleaning of rosin flux residues from printed circuit boards and assemblies. ALPHA 2002D can be used effectively in hot washing solutions or cooler rinsing solutions. This formulation contains silicone.

ALPHA 2007 DEFOAMER: This is a silicone-free material that reduces foam in aqueous systems, including alkaline cleaning of rosin flux residues from printed circuit boards. ALPHA 2007 can also be used effectively in hot washing solutions or cooler rinsing solutions.

ALPHA 2444 RINSE AID: This product is a biodegradable, alkaline, organic concentrate used to assist in the removal of residues following soldering and fusing processes using water-soluble fluxes.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

Scale Remover: ALPHA 926 removes deposits that tend to form on wetted parts of aqueous cleaning equipment, such as spray nozzles, heating elements, screens and tank surfaces. Such deposits would otherwise clog nozzles and screens, and cause heating elements to burn out.

The descaling procedure for a conveyORIZED cleaner wash tank is as follows:

1. Turn off wash tank pump and heaters.
2. Drain wash tank of rosin saponifier, neutralizer, etc.
3. Rinse with fresh water using a garden hose attachment and drain.
4. Fill tank with water and 5% by volume of ALPHA 926.
5. Heat to 120°F.
6. Start pump and circulate for one hour.
7. Turn off pump and heaters and drain tank completely.

8. Rinse thoroughly using garden hose and drain.
9. Refill the tank with fresh water.
10. Start pump and circulate for 10 minutes (no heat).
11. Turn off pump and drain tank completely.

Defoamer: ALPHA 2002D can be used as is or diluted with water. As a rule of thumb, ½ ounce (1 tablespoon) as received should be added for each 20 gallon of solution capacity (equivalent to 200ppm). For minimum usage to control foam, pre-dilution in at least three parts of process water is recommended. The “as received” or diluted defoamer can be added directly to the cleaning solution reservoir, where the recirculating actions will effectively disperse it. Stored defoamer should be shaken or agitated before use.

ALPHA 2007 is a silicone-free defoamer that can be used as is or diluted with water. A typical dilution of 1 ounce (or 30cc) should be used for each 20 gallons of solution capacity. The defoamer is particularly useful when used in a closed-loop water cleaning system. Most defoamers tend to be filtered out in the 5 micron filters commonly used in closed-loop systems, thus significantly reducing the life of the filter. ALPHA 2007 Defoamer was engineered to pass through the filter, thereby, maintaining the life of the filters.

For minimum usage to control foam, addition in small quantities at regular intervals of time is recommended. The defoamer can be used as received or may be pre-diluted in three parts of process water for effective dispersion.

Rinse Aid: ALPHA 2444 can be used in aqueous in-line spray cleaning or dip systems following the reflow or wave soldering of printed circuit assemblies using water-soluble fluxes. In conveyORIZED spray cleaning equipment, 1-3% of ALPHA 2444 is added to the heated, recirculating wash section to assist the cleaning water in penetrating crevices and in solubilizing flux residues.

Dilution of ALPHA 2444 in warm or hot water produces a normal turbidity. Solutions of ALPHA 2444 have very low foaming properties and no ammonia odor. ALPHA 2444 serves to neutralize the acidic flux residues which can build up on concentration to the point where solder joints could become etched.

In batch, dip or soak tanks, a pre-rinse in tap water is used to remove the bulk of the flux residues, followed by hot dipping in 1-3% ALPHA 2444 to remove remaining traces of flux.

Washing in ALPHA 2444 is always followed by thorough water rinsing to ensure removal of the dissolved flux residues and the rinse aid from board surfaces. If a high order of ionic cleanliness is desired, the final rinse should be in DI water.

TECHNICAL DATA

Item	Typical Value			
	ALPHA 926	ALPHA 2002D	ALPHA 2007	ALPHA 2444
Appearance	Clear yellow liquid	Clear viscous liquid	Clear viscous liquid	Clear blue liquid
Specific Gravity @ 25 °C (77 °F)	1.31	1.00	1.00	1.00
Pounds per Gallon @ 25 °C (77 °F)	10.9	8.3	8.3	8.3
pH of Concentrate	2.0	N/A	N/A	13.2
Flash Point of Concentrate	None	None	200 °C	99 °C (COC)
Shelf Life (from Date of Mfg.)	540 days	720 days	540 days	540 days
Packaging Size	5 & 55 gallons		1 pint & 1 gallon	5 & 55 gallons

PROCESSING GUIDELINES

ALPHA 926 SCALE REMOVER: This product is biodegradable. Discharge of effluent must be in accordance with local, state and federal regulations.

ALPHA 2444 RINSE AID: Do not transfer to aluminum or galvanized containers. Adequate ventilation is recommended when diluting the concentrate and for the diluted product in use. Cleaning equipment materials of construction should not include among the wetted parts:

Aluminum	Copper	Lexan (polycarbonate)	Neoprene
Brass	Galvanized Metals	Natural Rubber	Viton

This product is biodegradable. Discharge of effluent must be in accordance with local, state and federal regulations.

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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