

ARMAKLEEN® E-2001A

A Superior Aqueous Cleaner

DESCRIPTION

ARMAKLEEN E-2001A is an environmentally sensible, inorganic based, aqueous cleaner designed specifically for batch or in-line equipment used in cleaning electronic assemblies. The formulation provides a high level of solder joint brightness, even after extended washing cycles encountered in batch cleaners.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- No attack on solder. Bright solder joints.
- No VOC. Passes EPA emissions Test 24.
- Non-hazardous. No SARA 313 and WHMIS reporting requirements.
- No Amines/Glycol Ethers. Enhanced worker safety.
- Non-Flammable. Safe in all cleaning equipment.
- No odor for operator comfort.
- Very low BOD/COD. Easy disposal.

APPLICATION GUIDELINES

Process: ARMAKLEEN E-2001A is supplied as a liquid concentrate and diluted in use with deionized water, typically 5 to 10% ARMAKLEEN E-2001A by volume. For optimum cleaning, actual concentrations will vary with the type of flux or solder paste:

R, RMA, RA	6 to 10%
OA, No-Clean	3 to 5%
Operating Temperature	The temperature range is 150 to 165 °F (65 to 75 °C)

After cleaning with ARMAKLEEN E-2001A, parts should be rinsed using deionized water heated to 140 to 160 °F (60 to 70 °C). Unlike amine based saponifiers, ARMAKLEEN E-2001A is not degraded at operating temperatures. Bath life is, therefore, extended and cleaning efficiency is maintained even after idle periods.

Control: ARMAKLEEN E-2001A concentration in the wash bath is controlled by a simple titration. Consult your local sales or technical personnel if support is needed.

Procedure:

1. Measure accurately 10mL of the wash bath sample.
2. Add about 100mL of deionized water and mix.
3. Add 2 to 3 drops of Phenolphthalein indicator packet and swirl to a pink color.
4. Titrate with 8N Hydrochloric acid until the pink color becomes permanently colorless.
5. Read percent concentration from the graph.

TECHNICAL DATA

Item	Typical Values	Item	Typical Values
Appearance	Hazy White	Flash Point	None
Odor	None	Shelf Life (from Date of Mfg.)	720 Days
Specific Gravity (22 °C)	1.17	BOD	10mg/L
pH 10% solution	10.9	COD	11,000 mg/L
Surface Tension	28 dynes/cm	Packaging Size	1, 5 & 55 Gallons
Shelf Life	720 Days		

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.**

STORAGE

The product should be stored at room temperature above freezing and less than 120 °F.

CONTACT INFORMATION

**To confirm this document is the most recent version, please contact
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www.macdermidalpha.com**

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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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