

ALPHA BC-2400 Aqueous Electronics Cleaner

DESCRIPTION

ALPHA BC-2400 is an aqueous board cleaner that is a hybrid technology of surfactant and select solvents. **ALPHA BC-2400** was designed to effectively clean lead-free materials while providing the lowest cost of ownership technology in the industry. It is specially designed for optimum effectiveness on reflowed pastes, no-clean flux, lead-free flux, rosin flux, tacky flux, and uncured adhesives. **ALPHA BC-2400** is an extremely effective defluxer at high and low temperatures, can be diluted as needed (typically 10-20% concentration), and is considered relatively benign and environmentally friendly. If extra cleaning efficiency is needed for more challenging cleaning situations, **ALPHA BC-2400** may be applied as received without damage to delicate substrates.

FEATURES & BENEFITS

- Extremely effective on lead-free solder paste
- Creates brilliant solder joints
- Long bath life
- Excellent efficacy even at low temperatures
- Removes reflowed flux residues
- Removes SMT adhesives
- Low Foam
- Multi-Metal Safe
- No Sump-Side additives
- No HAP's
- Safe on precious metals
- Effective on tacky fluxes
- Non-Flammable
- Lowest Cost of Ownership

PHYSICAL PROPERTIES

<u>Appearance:</u>	Clear Liquid	<u>pH 100%:</u>	10.6-11.6
<u>Odor:</u>	Mild Amine	<u>pH 10%:</u>	10.3-11.3
<u>Specific Gravity:</u>	0.9 – 1.0	<u>VOC, 100%:</u>	873 g/L
<u>Weight/gallon:</u>	7.84 pounds	<u>VOC, 5.75%:</u>	50 g/L
<u>Flash Point, °F:</u>	None to boiling	<u>VP of VOC Comp.:</u>	17.23 mmHg at 20°C
<u>Boiling Point, °F/°C:</u>	248/128	<u>Water Solubility:</u>	Complete

GUIDELINES FOR SUCCESSFUL USE

- Effective at all temperatures, performance is optimum at 100-135°F (38-57°C).
- **ALPHA BC-2400** should be used as received (100%) when used with ultrasonics.
- For a mirror-like finish on solder joints, rinse with deionized (DI) or reverse osmosis (RO) water.
- Dry parts with hot or circulating air.
- Concentration, temperature and time should be optimized for the parts and equipment involved.
- **ALPHA BC-2400** is designed for lead-free cleaning. For the most difficult to clean lead-free materials, temperature and concentration may be increased accordingly.

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APPLICATION

Suggested Process Parameters:

<u>Process Type</u>	<u>Concentration Range</u>	<u>Temperature Range</u>	<u>Rinse/Dry</u>
Spray; In-line	10-25%	ambient-160°F (71°C)	DI/Air
Spray, Batch	10-25%	ambient-160°F (71°C)	DI/Air
Immersion, Agitation	10-100%	ambient-130°F (54°C)	DI/Air
Immersion, Soak	10-100%	ambient-130°F (54°C)	DI/Air
Immersion, Ultrasonics	100%	ambient-120°F (49°C)	DI/Air
Manual Wipe	5-100%	ambient	Optional

The above conditions are meant to be starting ranges. Process parameters may be increased or decreased as needed depending on the specific parts and soils involved. Your Cookson Electronics Applications Engineer or Sales Representative can assist you in optimizing your process parameters.

COMPATIBILITY

ALPHA BC-2400 is multi-metal safe for use on yellow metals, aluminum, ferrous and composites in addition to most precious metals. It is safe to use with PVDF, Kalrez[®], Teflon and ceramic elastomers and filters, while it is best used in polypropylene or stainless equipment.

APPLICATION NOTES

Rinsing and Drying:

- Use deionized (DI) or reverse osmosis (RO) water to minimize dendritic growth.
- Keep rinses fresh, monitoring by conductivity or resistivity. Recycle.
- Inspect nozzles and equipment regularly. Repair and maintain as needed.

Bath Life:

Bath life studies show high loading capacity. This equates to long tank life, low maintenance costs and reduced waste generation and chemical consumption.

Maintenance Methods:

ALPHA BC-2400 concentration should be monitored and maintained on a routine and regular basis depending on tank use. Best results are obtained with Dropper Titration Test Kits. Refractive Index is an alternative, less reliable method for tank monitoring.

ENVIRONMENTAL, HEALTH AND SAFETY

ALPHA BC-2400 is a biodegradable aqueous solution with less than 50 g/L VOC at 5%. It contains no CFC's or HAP's. It is non-flammable and non-corrosive. Refer to the Material Safety Data Sheet for more information.

STORAGE AND HANDLING

All ingredients in this product are TSCA listed. It is a non-flammable, non-corrosive liquid. Packaged in polyethylene containers with the seal unbroken, **ALPHA BC-2400** has a suggested shelf-life of one year.

AVAILABILITY

ALPHA BC-2400 is available commercially in one (1) gallon, five (5) gallon and 55 gallon containers