

Product Bulletin

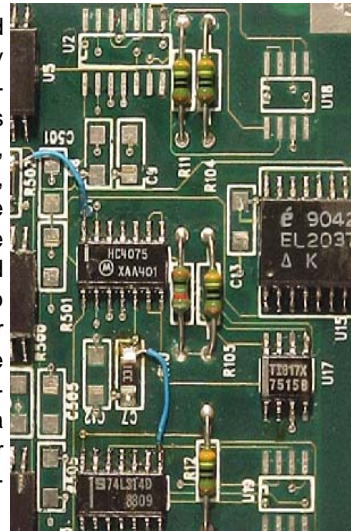
AQUANOX® A4512US

Aqueous Heavy Duty Ultrasonics Immersion Cleaner

FEATURES & BENEFITS

- MILD PH (=/- 10)
- NO SUMP-SIDE ADDS
- CLEAR SOLUTION LETS YOU SEE YOUR WORK
- MULTI-METAL SAFE
- LOW VOC
- NO HAP'S
- REMOVES MISPRINT PASTES
- REMOVES SMT ADHESIVES
- BRILLIANT SOLDER BUMPS
- EFFECTIVE ON LEAD-FREES
- EFFECTIVE ON TACKY FLUXES
- NON-FLAMMABLE
- LOW USE COST
- LONG BATH LIFE

AQUANOX A4512US is a mild aqueous amine blend specially designed for optimum effectiveness in immersion/ultrasonics applications removing pastes, tacky fluxes, uncured adhesives, rosin flux, no clean flux, lead-free flux and assembly residues while being relatively people-safe and environmentally friendly. Easy to use, A4512US is diluted further with water as desired, or it may be applied as received without damage to delicate substrates if extra cleaning efficiency is needed for more challenging cleaning situations.



TYPICAL SOILS

- Lead-free Flux
- Tacky Flux
- SMT Adhesives
- Misprinted Paste
- No Clean Flux
- RMA Flux
- OA Paste
- Oils
- Finger Prints
- Light Oxides

Typical Physical and Chemical Properties:

Appearance	Clear amber liquid	pH 100%	10.0-11.0
Odor	Mild amine	pH 10%	9.5-10.5
Specific Gravity	1.06	VOC, 6.25%	25 g/L
Weight/gallon	8.85 #	VP of VOC Comp.	0.18 mmHg at 20 °C
Flash Point, °F/°C	None to boiling	Refractive Index	38-46° Brix at 100%
Boiling Point, °F/°C	225/107	Water Solubility	Miscible

Suggested Process Parameters:

Process Type	Concentration Range	Temperature Range	Rinse/Dry
Spray; In-line	Not Recommended		
Spray; Batch	Not Recommended		
Immersion, Agitation	5-100%	amb.-160 °F	DI/Air
Immersion, Soak	5-100%	amb.-160 °F	DI/Air
Immersion, Ultrasonics	5-100%	amb.-160 °F	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 Kyzen Sales Representative can assist you in optimizing your process parameters.

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www.kyzen.com

AQUANOX A4512US

Aqueous Heavy Duty Immersion/Ultrasonics Electronics Cleaner

Compatibility:

AQUANOX A4512US 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.

Hints for Successful Use:

- Effective at all-temperatures, performance is optimum at 100-135 °F.
- AQUANOX A4512US may be used with ultrasonics.
- For a mirror finish on your solder bumps, 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.
- Lead-free and high temp. re-flow soils may require higher concentrations for optimum effectiveness.

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:

AQUANOX A4512US concentration should be monitored and maintained on a routine and regular basis depending on tank use. Your Kyzen Representative can assist you with this. Best results are obtained with a Dropper Titration Test Kit available from Kyzen.

Refractive Index is an alternative method for tank monitoring.

Environmental, Health and Safety:

AQUANOX A4512US is a biodegradable aqueous solution with 25 g/L VOC at 6.25%. 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 containing 2-aminoethanol.

Packaged in polyethylene containers, AQUANOX A4512US, with the seal unbroken, has a suggested shelf-life of one year.

Availability:

AQUANOX A4512US is available commercially in one (1) gallon, five (5) gallon and 55 gallon containers.

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