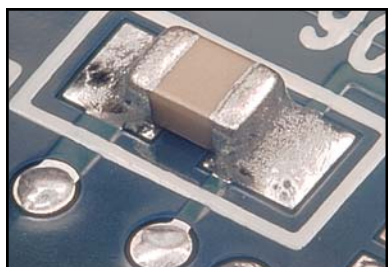


# AQUANOX® A4638

## Advanced Packaging Cleaning Chemistry

Aquanox® A4638 is an engineered electronic assembly and advanced packaging cleaning agent designed to remove flux residue from flip chip and low clearance components. A4638 is designed to remove water soluble polar flux residues and exhibits a low surface tension.



- **Flux Residue Removal from Flip Chip and Low Clearance Components**
- **Use at Low Concentrations**
- **Excellent Materials Compatibility**
- **Short Process Time**
- **Rapidly Dissolves Water Soluble Soils**

PRODUCT PROPERTIES	
<b>pH (10 g/L)</b>	9.4
<b>Flash Point</b>	None to Boiling
<b>Boiling Point</b>	212°F ~ 100°C
<b>Water Soluble</b>	Complete
<b>VOC, @10%</b>	44.3 g/L

TYPICAL PROCESSES	
<b>Application</b>	Spray
<b>Operating Concentration</b>	< 10%
<b>Temperature</b>	< 150°F ~ 66°C
<b>Rinse</b>	Hot DI Water
<b>Dry</b>	Hot Air

*The above process parameters are recommendations based on extensive testing done in Kyzen's Application Lab. Your Kyzen's Sales Representative can assist you in optimizing your process parameters.*

## ENVIRONMENTAL, HEALTH AND SAFETY REGULATIONS

AQUANOX® A4638 is a non-hazardous, biodegradable aqueous solution. It contains no CFC's or HAP's. Refer to the Material Safety Data Sheet for more information.

Kyzen is an ISO 9001:2008 company.



**Aqueous, Semi-Aqueous and Vapor Phase Chemistries  
Process Evaluation and Optimization • Contract Cleaning  
Cleanliness Testing • Soil Analysis**



# AQUANOX® A4638

## Advanced Packaging Cleaning Chemistry

### COMPATIBILITY

Aquanox® A4638 has proven compatible with all materials commonly used in electronic assembly manufacturing and cleaning processes. For specific compatibility information, please contact your Kyzen representative.

#### STORAGE AND HANDLING

- Packaged in Polyethylene Containers
- Store at 5-30°C/41-86°F in Original Container
- Standard Chemical Handling Practices Required
- Shelf Life of 5 Years, in Sealed Containers of 5 gallons / 25 liters or More

#### AVAILABILITY

- 1 Gallon
- 5 Gallons
- 55 Gallons
- 5 Liters\*
- 25 Liters\*
- 200 Liters\*

\*Liters Available in South Asia and Europe

### Free Cleaning Trials and Process Optimizations



Kyzen will conduct free trials at your factory or one of our global Applications Laboratories in North America, Asia or Europe. Our engineers and lab technicians have developed, optimized and evaluated thousands of customer cleaning processes over the last twenty years. Kyzen's Applications Labs are unrivaled in the industry and staffed with experts that have an average of thirty years technical experience.



[www.kyzen.com](http://www.kyzen.com)

Each laboratory is fully equipped with an extensive array of cleaning and analytical equipment, including, but not limited to:

- Batch Washers
- In-Line Washers
- Ultrasonic / SUI Systems
- Stencil Washers
- Vapor Degreasers
- GC (TCD and FID)
- Ion Chromatography
- FTIR Spectrophotometer
- Humidity Chamber

The data contained herein is based on information currently available to Kyzen and is believed to be factual and the opinions expressed to be that of qualified experts, however, the data is not to be taken as a warranty or representative for which Kyzen assumes legal or financial responsibility. Kyzen® and Aquanox® are registered trade names of Kyzen Corporation in the United States and other countries. 113012

**Global Headquarters (Nashville, USA): Tel: +1-615-831-0888**  
**EU (Belgium): Tel: +32 50 395 374 • Asia (Malaysia): Tel: +60 4 630 3000**