

WHAT IS SCIENCE WITHOUT CARE?



ELECTRONIC CLEANING
TECHNOLOGY



KYZEN.COM

WORLDWIDE ENVIRONMENTALLY RESPONSIBLE CLEANING TECHNOLOGIES

YOUR
cleaning problem is
OUR
cleaning problem.

We don't quit until we've delivered the perfect cleaning solution for your specific needs and situation. For more than 20 years, our clients have benefited from the care that goes into all our cleaning solutions. When science and care converge, that makes all the difference.



Cleaning is more than just getting the science right.

WE CARE. And that starts with getting the science right. But, it goes way beyond that. At KYZEN it means putting you, the customer first, no matter what. It means taking the time to really get to know you and understand your specific needs well enough to provide the most effective, environmentally-friendly cleaning technologies and solutions for your specific situation.

KYZEN has been pioneering the world's award-winning environmentally responsible cleaning technologies since 1990 by fusing our commitment to groundbreaking science and research with the care we

have for your manufacturing process and your success.

The word KYZEN itself is derived from the Japanese word for continuously improving. That persistent and determined drive to advance and better our cleaning technologies and service is manifested in the unique solutions developed to suit you.

You can rest assured that when a KYZEN scientist tackles a customer's problem, taking the time and care to look at it in new ways from every angle, the right solution results. We guarantee it.

"It's not enough to know that a customer needs a solution. We want to understand why they need it and how it can help them succeed in their business."



We understand your performance is directly related to ours.

What sets KYZEN apart among cleaning technology companies? Beyond the fact that we are continuously honored for our innovation and service, it's the way we approach your problems as though they were our own. Others may know that a customer needs a low surface tension solution. We know why you need it, how it needs to work within your distinct parameters, limitations and challenges, where the process problems are occurring, how the solution needs to be modified and your comfort level with installing it. This kind of in-depth knowledge of your processes, company, technical and

manufacturing needs is attained when science and care converge.

Care also means responding quickly, showing up anytime, anywhere in the world there is a problem and tackling it head on until it is successfully resolved. It's what compels us to want you to achieve the highest levels of performance. And it's what motivates our world-renowned scientists and engineers to pursue and achieve the revolutionary research and innovation you need today and 20 years from now.

ENVIRONMENTAL RESPONSIBILITY Our teams of scientific and engineering experts go beyond being compliant with current environmental regulations. We anticipate and stay ahead of regulatory mandates, exceeding even the most stringent standards.



SCIENCE doesn't know your job depends on solving a cleaning problem. But, **CARE DOES.**

At KYZEN we empower our people to go the extra mile in understanding and meeting a customer's specific cleaning challenges and needs. Their dedication goes well beyond just doing their job. It can be found in their actions and attention to detail each day.





GLOBAL RECOGNITION

KYZEN as a company, our world-renowned scientists and our products have all been honored with more than 40 prestigious industry awards over the years (several for multiple consecutive years) in categories ranging from new product innovation to customer service and environmental:

**CIRCUIT ASSEMBLY
SERVICE EXCELLENCE AWARD**

CIRCUIT ASSEMBLY NPI AWARD

GLOBAL TECHNOLOGY AWARD

SMT VISION AWARD

BEST COST OF OWNERSHIP AWARD

**BEST NEW PRODUCT
ADVANCED PACKAGING**

Electronics

Rapidly evolving technological advances in the electronics industry continually demand cleaning chemistries and processes that can quickly evolve and adapt along with them. At KYZEN, we not only respond to industry changes, we proactively combine science and care to anticipate the needs of the marketplace by staying constantly engaged with our customers. When critical elements in your process change, we change with them to suit your needs. All the while keeping up with the continuously evolving and improving solder technology be it no clean, water soluble or rosin.

From PCB Cleaning to Stencil Cleaning, on or

off the Printer, from wave fingers and reflow ovens to bench top cleaning in VOC sensitive locales, KYZEN's best in class aqueous, solvent and semi-aqueous electronics suite of technologies address a wide diversity of contaminants while effectively performing at the highest levels of compatibility with metals, plastics and elastomers.

In addition, we provide advanced packaging cleaning solutions that improve performance at a lower cost, are safe and have less environmental impact. Our award-winning precision cleaning chemistries provide the right solutions for each of your cleaning challenges.

GLOBAL REACH With manufacturing, applications, research and engineering centers based across the globe, KYZEN's expert engineers, scientists and technicians are readily accessible around the clock to customers all over the world.

"We have the resources, talent and technologies to support our customers wherever they are – on the line, in the field and in the engineering side of things."



| | SOILS REMOVED | | | PROCESS | | | |
|-----------------------------|--------------------|----------|----------|----------------------|-----------------|---------------|------------------|
| | OA / WATER SOLUBLE | NO CLEAN | RMA / RA | IMMERSION ULTRASONIC | SPRAY (IN-LINE) | SPRAY (BATCH) | STENCIL CLEANING |
| AQUEOUS PCB CLEANING | | | | | | | |
| AQUANOX® A4241 | • | • | • | | | • | • |
| AQUANOX® A4625B | • | • | • | | • | • | |
| AQUANOX® A4703 | • | | • | • | • | • | |
| AQUANOX® A4639 | • | • | • | | | • | |
| AQUANOX® A4651US | • | • | • | • | | | |

| | SOILS REMOVED | | | PROCESS | | |
|--|--------------------|----------|----------|----------------------|-----------------------|------------------|
| | OA / WATER SOLUBLE | NO CLEAN | RMA / RA | IMMERSION ULTRASONIC | SPRAY UNDER-IMMERSION | VAPOR DEGREASING |
| SOLVENT AND SEMI AQUEOUS PCB CLEANING | | | | | | |
| IONOX® I3302 | • | • | • | • | • | |
| MICRONOX® MX2501 | | • | • | | | • |

| | SOILS REMOVED | | | | PROCESS | | | | | | | |
|-------------------------|--------------------|----------------|---------------------------|---------------------------|-------------------|---------------------|---------------------------------|-----------------------------|--------------------------------|--------------------------|----------------------------|--|
| | OA / WATER SOLUBLE | NO CLEAN / RMA | MISPRINT RAW SOLDER PASTE | MISPRINT UNCURED ADHESIVE | UNDERSTENCIL WIPE | PRE-SATURATED WIPES | HAND-HELD ULTRASONIC TRANSDUCER | ULTRASONIC WASH WATER RINSE | ULTRASONIC WASH CLEANER RINSE* | SPRAY-IN-AIR WATER RINSE | SPRAY-IN-AIR CLEANER RINSE | |
| STENCIL CLEANING | | | | | | | | | | | | |
| AQUANOX® A8820 | • | • | • | • | | | | | • | • | • | |
| AQUANOX® A8830 | • | • | | | | | • | | | | | |
| AQUANOX® A8831 | • | • | • | • | | | | | | • | | |
| CYBERSOLV® C8882 | • | • | • | • | • | • | • | | | | | |
| CYBERSOLV® C8622 | • | | | | | • | | | | | | |
| CYBERSOLV® C3400 | | • | | | • | • | | | | | | |

| | SOILS REMOVED | | | | PROCESS | | | |
|--|--------------------|----------------|---------------------------|------------------|------------|------------------|-------|--------|
| | OA / WATER SOLUBLE | NO CLEAN / RMA | MISPRINT UNCURED ADHESIVE | RAW SOLDER PASTE | ULTRASONIC | IMMERSION / SOAK | SPRAY | MANUAL |
| BENCHTOP AND MAINTENANCE CLEANING | | | | | | | | |
| Oven | | | | • | | • | | • |
| Maintenance Pallets | | | | • | • | • | | |
| Rework | | | | • | | | | • |

* Only for Ultrasonic systems that keep chemistry in solution



AQUEOUS SPRAY-IN-AIR

AQUANOX A4241*Solution for PCB & Stencil Cleaning*

Aquanox® A4241 is an innovative aqueous cleaning solution designed to be effective on the toughest soils while protecting even the most sensitive parts from etch or darkening. A4241 is safe for multiple types of metal materials used in PCB and Stencil Cleaning including bare aluminum and copper.

AQUANOX A4703*Neutral pH Aqueous Cleaning Chemistry*

AQUANOX® A4703 is an aqueous cleaning solution designed with a pH neutral formulation combined with KYZEN's revolutionary inhibition technology. This combination delivers superior material compatibility and pristine parts.

AQUANOX A4625B*Aqueous Batch Cleaning Solution*

AQUANOX® A4625B is an innovative aqueous cleaning chemistry specifically designed to remove all types of electronic flux residues, including the latest lead-frees, in batch washers.

AQUANOX A4639*Electronic Assembly Aqueous Solution*

AQUANOX® A4639 is an engineered aqueous cleaning fluid that is effective on a wide range of soils at low operating temperatures and concentrations. AQUANOX A4639 provides exceptional cleaning results and protection of metallic surfaces with minimal monitoring and no sump-side additives.

ULTRASONIC SYSTEMS

AQUANOX A4651US*Low pH Ultrasonic Immersion Cleaner*

AQUANOX® A4651US is a low pH aqueous cleaning solution designed exclusively for use in ultrasonic immersion cleaning systems. AQUANOX A4651US will provide brilliant solder joints with no sump side additives and cleans exceptionally well on the latest flux formulations in electronic assemblies.

IONOX I3302*Broad Spectrum Electronics Cleaner*

IONOX® I3302 is a semi-aqueous solvent blend designed to remove difficult flux and paste residues including lead-free, rosin, no-clean, tacky flux, as well as other common electronic assembly residues.

VAPOR DEGREASING

MICRONOX MX2501*Engineered Vapor Cleaning Solvent for Advanced Packaging and Electronics Assembly*

MICRONOX® MX2501 is an engineered precision vapor cleaning solvent designed as a drop in replacement for modern era vapor degreasing equipment. MX2501 has "Zero" ozone-depletion potential and can replace TCE & TCA in many cleaning applications.



STENCIL CLEANING

AQUANOX A8820*Advanced Aqueous Stencil Cleaner*

AQUANOX® A8820 is an engineered Micro Cell Technology (MCT™) cleaning fluid designed to remove wet solder paste and uncured adhesive from stencils used with the surface mount printing process. A8820 is commonly used to clean the stencil once removed from the stencil printer. *NOTE: Also available in Ready to Use AQUANOX® A8820D*

AQUANOX A8831*Aqueous Spray-in-Air Stencil / Maintenance Cleaner*

AQUANOX® A8831 is a mild formulation that is compatible with stencils and effectively removes all types of solder pastes (water soluble, rosin, and no-clean) from fine pitch apertures. A8831 is a low odor cleaner than can be used in open systems. The green environmental properties of AQUANOX® A8831 make it an ideal option for areas where air emissions are highly regulated

AQUANOX A8830*Ultra Low VOC Aqueous Stencil Cleaning Agent*

AQUANOX® A8830 is a mild formulation that does not damage stencils and is highly effective at removing all types of solder pastes (water soluble, rosin, and no-clean) from fine pitch apertures. A8830 is a low odor cleaner that can be used in open systems. The green environmental properties of AQUANOX A8830 make it an ideal option for areas where air emissions are highly regulated



UNDER-STENCIL / MANUAL WIPE

*NOTE: All products listed below are available in Pre-Saturated Wipes and 16oz. Spray Bottles***CYBERSOLV C8882***Understencil Wipe Stencil Cleaning Solvent*

CYBERSOLV® C8882 is a fast-acting stencil cleaning solvent designed for the understencil wipe process. CYBERSOLV C8882 instantly dissolves all flux types within the solder paste, including water soluble, rosin and low residue no-clean fluxes.

CYBERSOLV C8622*Safe / Effective IPA Alternative Solvent*

CYBERSOLV® C8622 is a full strength solvent blend specifically designed as an IPA alternative in stencil wiping and manual bench top cleaning applications. Easy to use, CYBERSOLV® C8622 is applied in applications where IPA is typically used.

CYBERSOLV C3400*Electronics and Stencil Cleaning Solvent*

CYBERSOLV® C3400 is a solvent blend designed to remove all raw solder pastes in stencil cleaning applications while remaining compatible with materials commonly used in stencil construction. Easy to use, CYBERSOLV® C3400 is used as received and at ambient temperature.



BENCHTOP & MAINTENANCE

CYBERSOLV 141-R*Precision Solvent Bench-Top Cleaner*

CYBERSOLV® 141-R is a precision cleaner blend of organic solvents that is safe and ready to use for bench-top electronics cleaning. CYBERSOLV 141-R is effective on a wide variety of soils typically found in electronic assembly and maintenance cleaning applications. *Note: Available in Aerosol and Bulk Packaging*

CYBERSOLV C8508*Full-Strength Oven & Maintenance Cleaner*

CYBERSOLV® C8508 is the latest generation spray cleaner for reflow ovens and general equipment maintenance cleaning. CYBERSOLV C8508 has been tested on the toughest baked on flux residues with great success and has proven effective on the latest lead free flux.

KYZEN E5321*Pallet and Maintenance Cleaner*

KYZEN® E5321 is a room temperature pallet and maintenance cleaning agent. This cost effective chemistry removes all types of solder paste and flux residues, including baked on and hardened lead free high temperature flux residues from wave pallets and filters. Some maintenance applications may require higher concentrations and KYZEN® Booster 20 is available for parts with aluminum hardware.





Because we want you to achieve the highest levels of performance, we connect care with leading science to continuously improve, problem solve and create the most effective cleaning solutions to suit your specific needs.

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