



ECO-STENCIL™ AQ Batch Stencil Cleaner 1572



Introduction



Designed for ultrasonic and spray-in-air systems, Eco-Stencil AQ batch stencil cleaner offers great cleaning performance with much lower environmental impact. Effectively removes all types of solder paste (e.g. water-based, RMA, no-clean, lead-free) and uncured adhesives from stencils and misprinted boards. Eco-Stencil AQ is improved to reduce foaming in high pressure stencil equipments.

When a water rinse is a part of the cleaning process, Eco-Stencil AQ provides an economical, yet powerful cleaning solution. This water-based cleaner uses the latest in environmentally friendly surfactants to break down pastes and adhesives. Concentrated formula saves shipping and storage cost.

Drop-in replacement for semi-aqueous and aqueous cleaners. Eco-Stencil AQ can be used in all the most popular cleaning equipment: Aqueous Technologies, Austin America Technologies, SmartSonic, EMC Global, and more. Eco-Stencil AQ works with current filtration methods, providing a long bath life and minimized disposal cost.

Eco-Stencil AQ batch stencil cleaner has been tested and proven compatible with every part of your stencil — from the frame, screen and stencil to the adhesives binding it together.

Features / Benefits

- Quickly Clean Paste or Uncured Adhesive
- Effective on all solder pastes: Lead, Lead-Free, Aqueous, RMA & No-Clean
- Safe for Stencils, Misprinted Boards & Cleaning Equipment
- Biodegradable
- Non-Flammable
- Halide-Free — Prevents Ionic Contamination
- Low VOC, zero GWP
- Non-Ozone Depleting
- Moderate pH range (8-10 pH) — Avoids Corrosion

Applications

- For use in batch stencil cleaners with automatic or manual rinse
- Dilution: Recommended use concentration is 10%; Mix thoroughly.

About TECHSPRAY RENEW™

TECHSPRAY RENEW™ is a brand that represents **High Performance Eco-Cleaning™**. Techspray® has applied our expertise in solvent cleaning to formulate some of the most effective eco-friendly cleaners on the market. Performance is our top priority, using the best “green” solutions as they become available. We all are at the cusp of the ongoing movement toward sustainable products, packaging, and processes. It is Techspray’s intention to stay at the cutting-edge while keeping our products powerful and cost effective.

Automatic Stencil Cleaner Guide

Key: ● = Best ● = Acceptable ○ = No Recommended

Equipment Manufacturer	Equipment Type	1571 Eco-Stencil RF	1572 Eco-Stencil AQ	1574 Eco-Stencil AQ2
Aqueous Technologies	Ultrasonic, no rinse (e.g. StencilWasher-ECO)	●	○	○
Austin American Technologies	Spray-in-air, rinse (e.g. X30A)	●	●	●
	Spray-in-air, rinse (e.g. X30C)	●	●	●
EMC Global	Spray-in-air, no rinse (e.g. Cyber Clean 1000)	●	○	○
	Spray-in-air, rinse (e.g. CyberClean 3000)	●	●	●
Kerry	Spray-in-air, rinse (e.g. Microclean SC1000)	●	●	○
Manncorp	Spray-in-air, rinse (e.g. 201SC)	●	●	●
	Ultrasonic, rinse (e.g. StencilWasher-ECO)	●	●	●
PresSure Products	Ultrasonic, no rinse (e.g. N29TP)	●	○	○
SmartSonic	Ultrasonic, rinse (e.g. Model 900)	●	●	●
	Ultrasonic, rinse (e.g. Model 2003)	●	●	●

Directions

- **DILUTION: 1 PART ECO-STENCIL AQ : 9 PARTS DI WATER**
- Used as directed in your batch stencil cleaner equipment instructions.
- Higher concentration can be used to clean more difficult soils or the increase cleaning speed.
- A common method of checking concentration is by BRIX refractive index. For reference, the following concentrations and readings are provided.

Refractive Index

Dilution	5%	8%	9%	10% (recommended)	11%	12%	14%	16%	18%	20%
ND	1.3384	1.3416	1.3426	1.3435	1.3445	1.3456	1.3476	1.3494	1.3515	1.3524
BRIX	3.7	5.9	6.5	7.1	7.8	8.5	9.8	11.2	12.3	13.0

Chemical Properties

Properties based on diluted material, as recommended for use in batch system. For Chemical Composition, refer to MSDS.

- EXPOSURE LIMIT: Limits on components not established.
Manufacturer's recommendation 1000 ppm.
- PHYSICAL STATE: Liquid
- ODOR: Clean ethereal odor
- APPEARANCE: Clear, mobile liquid
- COLOR: Clear straw
- pH: 9.56 10.0g/L
- BOILING POINT: 97°C (207°F)
- FLASHPOINT AND METHOD (TAG Closed Cup): None to boiling point
- SOLUBILITY IN WATER: Fully miscible
- DENSITY: ~1 at 25°C
- VOC (by wt): 8.0% RTU, 77.0 g/L @ 10% concentration

Compatibility

Eco-Stencil AQ is compatible within normal operating conditions of batch stencil cleaning and with exposed materials normally found in the equipment and stencils.

Common Stencil Materials

Key: *Excellent = no effect that impacts functionality*

Material	Compatibility
Aluminum frame	EXCELLENT
Stainless steel stencil	EXCELLENT
Epoxy strip adhesion to frame	EXCELLENT
Epoxy strip adhesion to screen	EXCELLENT
Epoxy adhesion between screen & stencil	EXCELLENT
Loctite 420 adhesive	EXCELLENT
Loctite Hysol 1C adhesive	EXCELLENT

Test method: 24 hours immersion at 60°C (more severe conditions than general operating parameters).

Stencil identification: Labels and permanent marker (e.g. Sharpie) may be removed by prolonged or repeat exposure to Eco-Stencil AQ. Etching stencil identification into frame avoids this issue.

Test method: 24 hours immersion at 60°C (more severe conditions than general operating parameters).

Plastics

Key: *Excellent = no effect on stressed and unstressed plastic.*

Material	Compatibility
PTFE*	EXCELLENT
PVC-R*	EXCELLENT
HDPE*	EXCELLENT

Test method: TS 700-056, saturated/evaluate every 30 minutes for 6rs at ambient temperature.

* Common plastics in batch stencil cleaners

Elastomers

Key: ● = Best ○ = should be evaluated, due to particular compounding will have varying effect.

Material	ChemRaz	EPDM	Kalrez	Kel-Fr	Neoprene	PEEK	Silicone
Compatibility	●	●	●	●	●	●	●

Test method: 28 days immersion at 38°C (more severe conditions than general operating parameters).

* Common elastomers in in-line and batch (spray-in-air) cleaners

Metals

Key: ● = Excellent, no metal loss/change

○ = Very Good, <0.005% metal loss/change, slight tarnish

Material	Aluminum 2024 T3	Aluminum 6061 T6	Aluminum 7075	Brass foil	Copper foil	Galvanized Steel	Nickel 200	Stainless Steel 316*	Stainless Steel 304*
Compatibility	○	○	○	●	●	●	●	●	●

Test method: 4 hours immersion at 65°C (more severe conditions than general operating parameters).

* Common metals in in-line and batch (spray-in-air) cleaners

Environmental, Health and Safety

Techspray® is committed to developing products to ensure a safer and cleaner environment. We will continue to meet and sustain the regulations of all federal, state and local government agencies.

Eco-Stencil™ AQ Cleaner is fully compliant with CARB (California Air Resource Board) requirements. Also compliant with European REACH (Registration, Evaluation, Authorization & Restriction of Chemicals) and WEEE (Waste Electrical and Electronic Equipment Directive) initiatives. It does not contain RoHS (Restriction of Hazardous Substances) restricted substances, SVHC (Substances of Very High Concern) list substances, or Halides.

Eco-Stencil™ AQ Cleaner is a biodegradable, Halide-Free, low VOC, zero GWP, non-Ozone depleting aqueous solution. Refer to MSDS for additional information.

Packaging, Availability and Storage

Eco-Stencil™ AQ Cleaner available in the following sizes:

1572-G	1 gallon (3.8L), makes 10 gal (38 L) @ 10%
1572-5G	5 gallon (19L), makes 50 gal (190 L) @ 10%
1572-54G	54 gallon (205L), makes 540 gal (2041 L) @ 10%

Eco-Stencil™ AQ is not considered perishable; a shelf life of 5-years can be anticipated with proper storage, 41-86°F (5-30°C), in its original sealed container.

Resources

Techspray® products are supported by global sales, technical and customer services resources.

For additional technical information on this product or other Techspray® products in the United States, call the technical sales department at 800-858-4043, email tsales@techspray.com or visit our web site at: www.techspray.com.

North America
Techspray
P.O. Box 949
Amarillo, TX 79105
800-858-4043
email: tsales@techspray.com

Europe
ITW Contamination Control BV
Saffierlaan 5
2132 VZ Hoofddorp
The Netherlands
+31 88 1307 400
email: info@itw-cc.com

Countries Outside US
Call to locate a distributor
in your country.

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