



TECH DATA SHEET 1

Bath Analysis Kit for ECO-dFluxer™ SMT100 & ECO-STENCIL™ AQ 1590



Introduction

For ECO-dFLUXER & ECO-STENCIL AQ bath analysis use 1590-KIT to determine bath concentration and bath loading. A testing protocol keeps the cleaning process from drifting, with either concentration levels dropping, or the bath becoming so loaded with flux residues that it no longer functions properly.

Features / Benefits

- Quick and effective titration analysis
- Non-flammable

Applications

- For use with ECO-dFLUXER & ECO-STENCIL AQ bath concentration
- For use with ECO-dFLUXER & ECO-STENCIL AQ bath loading

About TECHSPRAY RENEW™

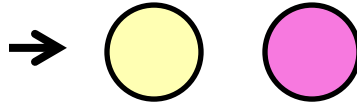
TECHSPRAY RENEW™ is a brand that represents **High Performance Eco-Cleaning™**. Techspray® has applied our expertise in solvent cleaning to formulate some of the most effective eco-friendly cleaners on the market. Performance is our top priority, using the best “green” solutions as they become available. 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.

Directions

CONCENTRATION TEST

1. Secure well-mixed cleaning agent from sump. If at process temp, allow to cool if possible.
2. Measure 100 ml of deionized (DI) water in the graduated cylinder and pour into the flask.
3. With the calibrated dropper, add the following to the flask and swirl to mix:
4. 1.0 ml of Eco-dFluxer SMT100 or
5. 4.0 ml of Eco-Stencil AQ
6. Add 1-2 drops of **Solution A** (red) to the flask. Swirl to mix. Solution should be pale yellow.
7. With **Solution B** (clear), add drop-wise while swirling to mix.
8. Count the total number of drops for the solution to turn to the first persistent pink color.
9. Refer to chart to determine % concentration from the total drop number.
10. Rinse all lab ware with DI water and dry.

NUMBER OF DROPS FOR SOLUTION TO TURN PINK



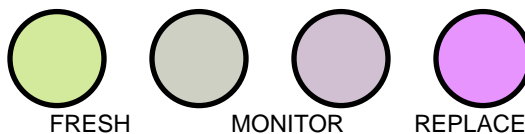
DROPS	CONCENTRATION	
	ECO-dFLUXER	ECO-STENCIL AQ
1	0.8%	
2	1.7%	
3	2.5%	
4	3.3%	
5	4.2%	
6	5.0%	
7	5.8%	
8	6.7%	
9	7.5%	
10	8.3%	
11	9.2%	
12	10.0%	
13	10.8%	
14	11.7%	
15	12.5%	

DROPS	CONCENTRATION	
	ECO-dFLUXER	ECO-STENCIL AQ
16	13.3%	
17	14.2%	
18	15.0%	
19	15.8%	
20	16.7%	
21	17.5%	
22	18.3%	
23	19.2%	
24	20.0%	
25	20.8%	
26	21.7%	
27	22.5%	
28	23.3%	
29	24.2%	
30	25.0%	

NOTE: Tests for Eco-Stencil AQ only valid if cleaning pastes. Cleaning adhesives will invalidate tests.

LOADING TEST

1. This test is a gross measure of the amount of remaining alkalinity in the cleaning agent and thus an indication of loading. It is a go/no go test determined by a solution color.
2. Secure well-mixed cleaning agent from sump. If at process temp, allow to cool if possible.
3. Measure 100 ml of deionized (DI) water in the graduated cylinder and pour into the flask.
4. With the calibrated dropper, add 1.0 ml of the cleaning agent to the flask. Swirl to mix.
5. Add 2-3 drops of **Solution C** (dark green) to the flask. Swirl to mix.
6. If the resulting color is green/green-yellow, there is sufficient alkalinity to continue cleaning and the solution is not fully loaded. If the resulting color is grey, there is a slight amount of alkalinity left and the solution may be changed at that point or closely monitored. This solution is heavily loaded and should be replaced.



7. If the solution is violet/purple, there is insufficient alkalinity left to continue cleaning (fully loaded). The solution is spent and should be changed.
8. Rinse all lab ware with DI water and dry.

NOTE: Tests for Eco-Stencil AQ only valid if cleaning pastes. Cleaning adhesives will invalidate tests.

Chemical Properties (MSDS available on request)

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-dFLUXER & ECO-STENCIL AQ Bath Analysis Kit 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-dFLUXER & ECO-STENCIL AQ Bath Analysis Kit is Halide-Free, low VOC, zero GWP, non-Ozone depleting aqueous solution. *Refer to MSDS for additional information.*

TechLab Analysis and Capabilities

Techspray's TechLab offers a state-of-the-art cleaning, coating and analytical services to help customers optimize their processes. Cleaning equipment includes inline, batch, ultrasonic, and vapor-degreasing systems. This equipment allows us to better duplicate your production environment for process optimization and troubleshooting.

Techspray has access to ultra-sensitive analytical equipment to not only detect contamination, but to speciate the residues to determine whether or not they may lead to current leakage, electrochemical migration, and even board failure. Testing & analytical capabilities include:

- Ion chromatography (IC) for ionic cleanliness
- SIR testing for materials and finished assemblies
- Electromigration test
- R.O.S.E. testing for general ionic measurements
- High magnification digital photo documentation

TechLab uses a localized extraction method, which seals over troublesome areas of the board and injects high temperature steam, and then collects the affluent for analysis. This method is the most sensitive extraction process available, allowing identification of ionic contamination that other methods commonly miss.

Packaging and Availability

1590-KIT

ECO-dFLUXER & ECO-STENCIL AQ Bath Analysis Kit

Contents:

- 1 – Storage / carrying case
- 1 – Erlenmeyer flask
- 1 – Graduated cylinder
- 1 – Metered dropper
- 1 – Instruction card
- Solution A Concentration Indicator, 2 oz bottle
- Solution B Concentration Titrant, 2 oz bottle X 2
- Solution C Loading Indicator, 2 oz bottle

1590-ABC

Solution Refills :

- Solution A Concentration Indicator, 2 oz bottle
- Solution B Concentration Titrant, 2 oz bottle X 2
- Solution C Loading Indicator, 2 oz bottle

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 and mobile site at: mobile.techspray.com

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