

Eco-dFluxer SMT400 In-Line Defluxer

Product# 1540

Product Description

Eco-dFluxer SMT400 is a pH neutral, water-based, environmentally friendly cleaner that is designed to work in both inline and batch cleaning equipment. An optimal combination of solvents and saponifiers lowers surface tension for penetration under low stand-offs, and powerful cleaning action to remove all flux residues.

Effective on a wide variety of solders and fluxes: Lead, Lead-Free, Aqueous, RMA, No-Clean, and especially new Halide-Free fluxes. High compatibility with common PCB metals & plastics. Eco-dFluxer SMT400 is highly filterable with long bath life.

High performance cleaning gives you brilliant solder joints and allows you to increase dilution, increase line speeds, reduce waste water, decrease cost per board, and most importantly eliminate field failures due to ionic contamination!

Drop-in replacement for semi-aqueous and aqueous cleaners. Eco-dFluxer SMT400 has been tested and proven compatible with PC-boards and all the most popular cleaning equipments: Speedline, Austin America Technologies, Aqueous Technologies and more.

Features / Benefits

- Best with sensitive materials (Cu, Al, etc.)
- High compatibility with common PCB metals & plastics
- Effective on a wide variety of solders and fluxes, especially Halide Free flux
- Nonflammable
- Ultra rinse-able
- Highly concentrated – 10%-15% dilution
- Safest and most eco-friendly formula
- Low VOC, zero GWP
- Non-ozone depleting
- Halide-Free — Prevents Ionic Contamination
- Not regulated, non-DG shipping

Applications

- For use with in-line and batch (spray-in-air) equipment
- Dilution: 10%, 15% or 20% Eco-dFluxer SMT400 to DI water
- pH neutral and eliminates need for waste water neutralization

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.



Chemical Properties

Properties based on diluted material, as recommended for use in in-line and batch (spray-in-air) system.

EXPOSURE LIMIT:	Limits on components not established.
PHYSICAL STATE:	Liquid
ODOR:	Mild, Slightly sweet
pH:	7.0 to 7.7 @ 10g/L
BOILING POINT:	95°C (203°F)
FLASHPOINT AND METHOD (TAG Closed Cup):	None to boiling point
SOLUBILITY IN WATER:	Miscible
DENSITY:	~1.01 @ 25°C (77°F)
VOC (concentrate as supplied.):	50.5% (EPA and Federal) 551.9 g/L (SCAQMD)
Shelf Life:	5 years unopened, 2 years open

Machine Set-Up Aqua Storm 200

1. Line Speed	0.7 ft/min
2. Temperatures	
1. Wash Temperature	155F
2. Rinse Temperature	140F
3. Drier Temp 1	150F
4. Drier Temp 2	250F
5. Drier Temp 3	250F
3. Spray Pressures	
1. Pre-Wash (Upper/Lower)	50 psi/40 psi
2. Wash ((Upper/Lower)	70 psi/60 psi
3. Hurricane (Upper/Lower)	40 psi/30 psi
4. Chem Isolator (Upper/Lower)	50 psi/40 psi
5. Rinse (Upper/Lower)	60 psi /50 psi
6. Rinse Hurricane (Upper/Lower)	40 psi/30 psi
4. Height	
1. Wash Height	4.2 inches
2. Rinse Height	4.7 inches

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Compatibility & Flux Test

Eco-dFluxer SMT400 is compatible within normal operating conditions of in-line and batch (spray- in-air) cleaning and with exposed materials normally found within respective equipment.

SMT400 has been tested on tough to clean no-clean, lead free and rosin based fluxes. Some of the tested fluxes listed below

Indium 8.9HF1 no clean*	Indium 5.8LS lead free
Indium 8.9HF no clean	Kester NP545 rosin
Indium 10.1 lead free	AIM RMA258 rosin
Indium 10.8HF lead free	AIM M8 no clean
Indium 3.2 water based	Indium SMQ

*8.9HF1: Line Speed Comparison with above set-up

1.	0.7 ft/min	1 pass 100% clean
2.	1.5 ft/min	1 pass 50% to 70% clean 2 passes 100%
3.	2.5 ft/min	1 pass 50% to 70% clean 2 passes > 90% 3 passes 100%

Usage Instructions

- Recommended use concentration is 10%; Mix thoroughly with DI water.
- Used as directed in your in-line and/or batch (spray-in-air) equipment instructions.
- Higher concentration can be used to clean more difficult soils. 15% is common, 20% is possible.
- Adjust time/temperature/spray to optimize process.

Packaging and Availability

Eco-dFluxer™ SMT400 Cleaner available in the following sizes:

1540-G	1 gallon (3.8L), Makes 10 gal (25 L) @ 10%
1540-5G	5 gallon (19L), Makes 50 gal (125 L) @ 10%
1540-54G	54 gallon (205L), Makes 540 gal (1360 L) @ 10%

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. Important Notice to Purchaser/User: The information in this publication is based on tests that we believe are reliable. The results may vary due to differences in tests type and conditions. We recommend that each user evaluate the product to determine its suitability for the intended application. Conditions of use are outside our control and vary widely. Techspray's only obligation and your only solution is replacement of product that is shown to be defective when you receive it. In no case will Techspray® be liable for any special, incidental, or consequential damages based on breach of warranty, negligence or any other theory.

Environmental Policy

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™ SMT400 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-dFluxer™ SMT400 Cleaner is Halide-Free, low VOC, zero GWP, non-Ozone depleting aqueous solution. *Refer to SDS 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 identify the residues to determine whether or not they may lead to current leakage, electrochemical migration, and even board failure.

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.