



TECH DATA SHEET 1

ECO-dFluxer™ SMT300 In-Line Defluxer 1530



Introduction

Eco-dFluxer SMT300 is a 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 SMT300 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 SMT300 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

- Effective on a wide variety of solders and fluxes, especially Halide-Free flux
- Excellent compatibility with sensitive materials (Cu, Al, etc.), leaving shiny solder joints
- High compatibility with common PCB metals & plastics
- Non-flammable
- Ultra rinsable
- Highly concentrated – 10%-15% dilution
- Biodegradable
- Low VOC, zero GWP
- Non-ozone depleting
- Halide-Free — Prevents Ionic Contamination

Applications

- For use with in-line and batch (spray-in-air) equipments
- Dilution: 10% Eco-dFluxer SMT300 to DI water

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

- 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 or adjust time/temperature/spray to optimize process.

Chemical Properties *(MSDS available on request)*

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: Ammoniacal odor
- APPEARANCE: Clear, mobile liquid
- pH: 10.3 @ 10g/L
- BOILING POINT: 95.5°C (204°F)
- FLASHPOINT AND METHOD (TAG Closed Cup): None to boiling point
- SOLUBILITY IN WATER: Miscible
- DENSITY: ~0.98 @ 25°C (77°F)
- VOC (by wt): conc.: 51.9% (EPA), 508g/L, @ 10% conc.: 5.19% (EPA), 50.8g/L

Compatibility

Eco-dFluxer SMT300 is compatible within normal operating conditions of in-line and batch (spray-in-air) cleaning and with exposed materials normally found within respective equipment.

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™ SMT300 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™ SMT300 Cleaner 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, Availability and Storage

Eco-dFluxer™ SMT300 Cleaner available in the following sizes:

1530-G	1 gallon (3.8L), Makes 10 gal (25 L) @ 10%
1530-5G	5 gallon (19L), Makes 50 gal (126 L) @ 10%
1530-54G	54 gallon (205L), Makes 540 gal (1360 L) @ 10%

1930 70mm wrench for 5 gallons container cap

Defoamer DF1 : Optional Defoaming agent for Eco-dFluxer SMT300

Reduce foaming as cleaner becomes loaded to extend bath life.

- Effective at all processing temperatures
- Extends bath life
- Silicone & particulate free
- Non-flammable

1555-P 1 pint (0.47L), plastic container

SHELF LIFE:

Eco-dFluxer SMT300 is not perishable. Shelf life is undefined because it is dependent on storage conditions, not by the nature of the product itself. This product, in its original unopened container, is expected to remain within original specifications up to 5 years if stored in a controlled environment, 41-86°F (5-30°C). If a shelf life needs to be defined for an inventory management process (e.g. ISO9001), a date can be set based on the manufacturing date referenced on the product label.

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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