## CHEMTRONICS ${ }^{\circledR}$ Technical Data Sheet

## Flux-Off ${ }^{\circledR}$ Aqueous

## PRODUCT DESCRIPTION

Flux-Off ${ }^{\circledR}$ Aqueous is an extra-strength water based cleaner for flux removal in ultrasonic, batch and in-line cleaning systems. It is an excellent cleaner for the removal of all rosin and no clean flux types from electronic subassemblies, printed circuit boards and all other electronic components. This concentrated formula can be diluted 1:10 with deionized water for handling all cleaning applications. Flux-Off ${ }^{\circledR}$ Aqueous will effectively remove other contaminants such as dirt, grease, handling soils and molding compounds.

- For use with ultrasonic, batch and in-line cleaning systems
- Quickly removes all rosin and no clean flux types
- Removes encrusted, hard, baked fluxes
- Powerful cleaner leaves no residue
- Contains no CFCs or HCFCs
- Nonabrasive and noncorrosive
- Nonflammable
- RoHS compliant


## TYPICAL APPLICATIONS

Flux-Off ${ }^{\circledR}$ Aqueous removes flux residues and cleans:

- Chip Carriers
- Heat Sinks
- Metal Housings and Chassis
- Motors and Generators
- Printed Circuit Boards
- Surface Mount Device Pads

TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

| Boiling Point | $212^{\circ} \mathrm{F}$ (Initial) |
| :--- | :---: |
| Solubility in Water | $100 \%$ |
| Specific Gravity | 1.03 |
| Flash Point (TCC) | None |
| Evaporation Rate <br> (butyl acetate=1) | $>1$ <br> (similar to water) |
| Appearance | Clear, Amber Liquid |
| Odor | Mild |
| Surface Tension <br> (dynes $/ \mathbf{c m}$ @ $73^{\circ} \mathbf{F}$ ) | 28.0 |
| pH | 12.5 |
| VOC |  |

VOC* Content:
CARB and Federal rule
SCAQMD Rule 1122
16 \%
$165 \mathrm{~g} / \mathrm{L}$ concentrate $17 \mathrm{~g} / \mathrm{L}$ 1:10 dilution

| RoHS Compliant |  |
| :--- | :--- |
| Shelflife | 2 years after opening |

*Volatile Organic Compound (VOC) information is calculated on a weight basis using the VOC definition of California Air Resources Board (CARB) Consumer Product Regulations, South Coast Air Quality Management District (SCAQMD) Rule 102 and the Federal definition published in 40 CFR 51.100(s).

## COMPATIBILITY

Flux-Off ${ }^{\circledR}$ Aqueous is generally compatible with most materials used in printed circuit board fabrication. With any cleaning agent compatibility must be determined on a noncritical area prior to use.

| Material | Compatibility |
| :---: | :---: |
| ABS Resin | Excellent |
| Buna-N | Fair |
| Butyl | Excellent |
| EPDM | Excellent |
| Graphite | Excellent |
| HDPE | Excellent |
| Kynar ${ }^{\text {TM }}$ | Excellent |
| LDPE | Excellent |
| Lexan ${ }^{\text {TM }}$ | Excellent |
| Neoprene | Good |
| Noryl ${ }^{\text {® }}$ | Good |
| Nylon 101 | Good |
| Cross-Linked PE | Good |
| Polyacrylate | Fair |
| Polypropylene | Good |
| Polystyrene | Good |
| PVC | Fair |
| Silicone Rubber | Good |
| Teflon ${ }^{\text {™ }}$ | Excellent |
| Viton ${ }^{\text {TM }}$ | Good |

## USAGE INSTRUCTIONS:

For industrial use only.
Read MSDS carefully prior to use.
Dilute 1:10 with deionized water for general cleaning. Can be used in hot or cold immersion, ultrasonic or aqueous cleaning systems. For immersion systems, soak as necessary. For ultrasonic cleaning, add Flux-Off ${ }^{\circledR}$ Aqueous to the ultrasonic cleaning tank, allow about two minutes for the mixture to degas, and immerse the part to be cleaned in the ultrasonic cleaner. After cleaning, rinse parts thoroughly in deionized water and dry where required.

AVAILABILITY
ES132 1 Gallon Liquid

| ENVIRONMENTAL IMPACT DATA |  |  |  |
| :--- | :--- | :--- | :--- |
| HCFC-141b None HFC None <br> HCFC-225 None nPB None $\mathbf{l}$ |  |  |  |

Hydrochlorofluorocarbons (HCFCs) are regulated under the Montreal Protocol as Class II ozone depleting substances. HCFC-141b is no longer produced in the US under this legislation. HCFC-225 is planned for production phase-out in 2015. Hydrofluorocarbons (HFCs) are not currently regulated.
EPA has listed n-propyl bromide ( nPB ) as an acceptable alternative to ozone depleting substances in metal, precision, and electronics cleaning under Section 612 of the Clean Air Act.

## TECHNICAL \& APPLICATION ASSISTANCE

ITW Chemtronics ${ }^{\circledR}$ provides a technical hotline to answer your technical and application related questions. The toll free number is: 1-800-TECH-401.

## NOTE:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly.
ITW CHEMTRONICS ${ }^{\circledR}$ does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

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