

HYDREX[®] LF Aqueous Cleaner

Technical Data Sheet



HYDREX LF is a high performance aqueous spray and immersion cleaner designed for heated lead-free defluxing applications. This proprietary cleaner is based on mixture of solvents, saponifiers and surfactants.

HYDREX LF is a low-foaming cleaner, selected to remove a broad range of lead-free and lead-based rosin, no-clean and water-soluble flux residues from circuit assemblies.

HYDREX LF is also selected to remove uncured Surface Mount Device (SMD) adhesives and raw solder pastes from stencils and circuit assemblies as well as baked-on residues from solder pallets and "B" side misprints.

HYDREX LF is formulated with an advanced defoaming package, preventing the formation of foam due to water-soluble masking agents and flux residues.

HYDREX LF provides operational versatility, suitable for use in spray-in-air, spray-under-immersion and ultrasonic defluxing and stencil cleaning equipment.

HYDREX LF does not dull solder joints and offers excellent compatibility with many substrates and materials used in electronic assembly cleaning applications.

HYDREX LF is supported by a global network of technical representatives, capable of solving the industries most difficult cleaning applications.



HYDREX is a registered trademark of Petroferm Inc.

FEATURES & BENEFITS

- Used at Elevated Temperatures
- Low-Foaming
- Does Not Dull Solder Joints
- Operational Versatility
- Material Compatibility
- Removes Lead-Free Residues
- Removes Raw Solder Pastes
- Removes Adhesives
- Removes Ionics
- Non-Ozone Depleting

PROCESS

Application	Conc. (%)	Temp. °F (°C)
Defluxing Spray-In-Air/Immersion Ultrasonic	5 to 15	100 to 140 (38 to 60)
Stencil/Misprint Cleaning Spray-In-Air/Immersion Ultrasonic	5 to 8	77 to 110 (25 to 43)
Rinse: Use deionized water at 100°F to 170°F (38°C to 76°C).		
Dry: Use ambient or heated forced air.		

SOILS REMOVED

- Lead-Free Flux Residues
- No-Clean Flux Residues
- RMA Flux Residues
- OA Flux Residues
- Fingerprint Oils
- Ionic Contamination
- Solder Balls
- Uncured SMD Adhesives
- Lubricants, Oils, Greases
- Light Oxides

PROPERTIES

Appearance.....	Clear amber liquid
Odor.....	Mild amine
Flash Point.....	185°F (85°C)
Specific Gravity (25°C).....	0.96
pH value (10%).....	11.0 to 11.5
Freeze/Thaw Stability.....	Stable
Viscosity (25°C)	Approx. 1.0 cps (in use)
Bath Monitoring.....	Titration

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EQUIPMENT

- HYDREX LF is suitable for use in a variety of commercially available cleaning equipment including inline and batch spray-in-air washers and spray-under-immersion and ultrasonic washers.
- Bath concentration may be monitored by titration.
- Companies requiring new cleaning equipment may contact Petroferm for supplier recommendations.

HEALTH & SAFETY

Environmental

HYDREX LF is a suitable alternative to ozone depleting substances and other materials with high environmental impact.

Health & Safety

HYDREX LF is a suitable alternative to substances with high exposure hazards.

Fire Risk

HYDREX LF is a suitable alternative to flammable materials.

SHELF LIFE

The shelf life for this product is thirty-six (36) months when it is stored in its original, sealed container at room temperature.

However, the product should be inspected after thirty-six (36) months from the date of manufacture prior to customer use.

Typical property data is not intended for specification purposes. Petroferm, its sales agents and distributors make no warranty of merchantability of the product or of product fitness for any particular purpose. This product and all information supplied are used at the purchaser's own risk. The purchaser assumes all risk of use or handling of the product, whether in accordance with directions or not.

ENVIRONMENTAL/REGULATORY

Ozone Depletion Potential (ODP).....	Zero
Global Warming Potential (GWP).....	Zero
Volatile Organic Compound (VOC).....	< 100 g/l (10%)
Significant New Alternatives Program (SNAP).....	*Approved
Hazardous Air Pollutant (HAP).....	No
National Emission Standards for Hazardous Air Pollutants (NESHAPs).....	Not regulated
Superfund Amendments and Reauthorization Act (SARA).....	Not regulated
Resource Conservation and Recovery Act (RCRA).....	Not regulated

**HYDREX LF components*

DISPOSAL/SAFETY

Disposal: Petroferm recommends contacting your current or local environmental service company for disposal of this product.

Safety: Please see Material Safety Data Sheet for further information.

Storage: HYDREX LF should be stored in the original container, preferably above 50°F (10°C), in a ventilated, fire-resistant building.

Packaging: HYDREX LF is available in 40 lb (18 kg) pails and 440 lb (200 kg) drums.



Petroferm

Advanced Products for Advanced Cleaning

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Doc. No. 0325 Rev. No.: 0001 Date: 1-08