



# BIOACT<sup>®</sup> 280E

## Technical Data Sheet

BIOACT 280E is a bio-based semi-aqueous cleaner designed to operate in heated immersion applications. This proprietary cleaner is based on a blend of aliphatic esters and surface-active agents with low environmental impact.

BIOACT 280E is designed to quickly dissolve paraffinic and microcrystalline plating and thermoplastic fixturing waxes. It also effectively removes pitches, greases, buffing compounds, metalworking fluids and lubricating oils.

BIOACT 280E has a very high flash point, low odor and high wax loading capability (up to 40%). It does not contain ozone depleting substances or hazardous air pollutants (HAPS).

BIOACT 280E is a suitable replacement in dewaxing operations using trichloroethylene (TCE), HCFC-141b, HCFC-225, perchloroethylene (PCE), methylene chloride (MeCl) and n-propyl bromide (nPB). It may also replace operations using aqueous cleaners, petroleum-derived solvents and hot oil.

BIOACT 280E is safe for use with ferrous and non-ferrous alloys such as aluminum, copper and copper alloys, magnesium, nickel, steel, stainless steel, titanium and zinc. It is also compatible with many polymeric substrates and elastomers.

BIOACT 280E is approved by leading aerospace OEMs and conforms to Stress Corrosion of Titanium, Hydrogen Embrittlement, Sandwich Corrosion, Intergranular Attack and Stock Loss.

BIOACT 280E is supported by a global network of technical representatives, capable of solving the industries most difficult cleaning applications.

BIOACT is a registered trademark of Petroferm Inc.

### FEATURES & BENEFITS

- Removes High Melting Soils
- Replaces Vapor Degreasing
- Replaces Hot Oil
- Readily Biodegradable
- Aerospace Approved
- Material Compatibility
- Up to 40% Wax Loading
- Very Low Odor
- Non-Corrosive
- Low Toxicity

### PROPERTIES

Appearance.....	Clear liquid
Odor.....	Very Low
Flash Point.....	298°F (148°C)
Specific Gravity (25°C).....	0.86
Viscosity (25°C).....	7.3 cps
Vapor Pressure (20°C).....	<0.002 mm Hg
Vapor Density (Air=1).....	>1
pH (5%).....	5-7
Kauri-Butanol (KB) Value.....	90

### SOILS REMOVED

- Coolants
- Fixturing Waxes
- Greases
- Hydraulic Fluids
- Microcrystalline Waxes
- Paraffinic Waxes
- Pitches
- Plating Waxes
- Polishing Compounds
- Buffing Compounds

### PROCESS

**Wash:** Add BIOACT 280E at full concentration to the wash tank reservoir. Typical operating temperatures for wax removal range between 190-205°F (88-96°C). Lower temperatures may be used for oil and grease removal. Mechanical agitation is recommended.

**Rinse:** Remove BIOACT 280E from the substrate surface with a heated water rinse. Or, add CleanSafe 787C to extend the bath life of BIOACT 280E and improve rinsing. Mechanical agitation is recommended. Most systems incorporate two or three successive rinses.

# BIOACT 280E

## EQUIPMENT

- BIOACT 280E is suitable for use in a variety of commercially available cleaning equipment including immersion/soak tanks with air, liquid or mechanical agitation.
- Companies requiring new equipment may contact Petroferm for supplier recommendations.

## APPROVALS & TESTING

### Approvals

Conforms to Boeing D6-17487 Revision N  
CFM PCN No. 2007/00123 V1.B, CFM56 Engine  
Conforms to Pratt & Whitney 36604 Rev. B Hot Corrosion  
IAE CoMat 01-460  
Pratt & Whitney SPOP 37 Method 2, PMC 8913-11,-12  
Rolls-Royce OMat 1/288D Wax

### Testing

ASTM F-945, F-502, F-519, F-1110, F-2111, SAE ARP 1755

## 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).....Essentially Zero  
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

## 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:** BIOACT 280E should be stored in the original container, preferably above 50°F (10°C), in a ventilated, fire-resistant building.

**Packaging:** BIOACT 280E is available in 36 lb (16 kg) pails and 400 lb (181 kg) drums.



# Petroferm

*Advanced Products for Advanced Cleaning*

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