

Products	Application	Approvals/Test Method Conformance
BIOACT® 105 <i>Solvent Blend</i>	Hand-wipe Immersion	<ul style="list-style-type: none"> • Approved by Bell Helicopter Bulletin No.: 1915 Solvents, Blended Organic, Cold Degreasing (Liquid & Pre-saturated Wipes) • Conforms to Boeing D6-17487 Revision L Exterior & General Cleaners & Liquid Waxes (except: ASTM F-484 Stress Cracking Tests on Acrylic Plastics, Type C) • Approved by CFM PCN No. 2007/00123 V1.B, CFM56 Engines • Conforms to Douglas Aircraft Co CSD #1 General Purpose Cleaner (<i>exceptions: ASTM F-484 Stress Cracking Tests on Acrylic Plastics, Type C</i>) • Approved by GE for Cleaning Method No. 23 Hand-Wipe Degreasing, SPM Task 70-21-23-110-053 (CO4-251) • Approved by GE for as alternate to SPM TASK 70-21-01-110-001, Cleaning Method No.1 Solvent Degreasing, or SPM TASK 70-21-22-110-042 Cleaning Method No. 22 Light Duty Aqueous Cleaning for Localized Hand-Wipe Cleaning • Approved by GulfStream Aerospace Standard GAS115H for Solvent Cleaner/Degreaser, Mixed Hydrocarbons, Part No. GAS115H1 • Approved by Pratt & Whitney Commercial Standard Practices Manual SPOP 208, PMC 8929 Hand-Wiping Solvent (SPM Rev 120, Part #585005) • Conforms to Pratt & Whitney PWA 36604 Rev D Hot Corrosion (AMS 4037) • Approved by Rolls-Royce CSS No. 255 Type A Non-Halogenated Organic Solvent Cleaner (CSS200, CSS253, RPS578) • Approved by United Airlines Engine Parts Cleaning, Part #: SOL3001-17 for BIOACT 105 Precision Cleaner, SOL3001-17TTL10X12 for the Saturated Wipes • ASTM F-945, F-1110, F-502, F-519, F-485, F-483 F-2111
BIOACT® 121 <i>Solvent</i>	Hand-wipe Immersion	<ul style="list-style-type: none"> • Conforms to Boeing D6-17487 Revision N Solvent Cleaners, General Cleaning • Conforms to Boeing BAC 5750 Section 5.11:d-Limonene, 95% minimum, Solvent Cleaning • Conforms to Boeing D6-17487 Revision L Exterior and General Cleaners and Liquid Waxes • Conforms to Douglas Aircraft Company CSD#1 Type 1: Materials & Procedures for General Exterior Cleaning of Painted & Unpainted Surfaces • ASTM F-1110, F-502, F-519, F-945, F-485, F-484, F-483
BIOACT® 145 <i>Solvent Blend</i>	Hand-wipe Immersion	<ul style="list-style-type: none"> • Conforms to Boeing D6-17487 Revision L Exterior & General Cleaners & Liquid Waxes • Conforms to Douglas Aircraft Company CSD#1 General Purpose Cleaner • Approved by GulfStream Aerospace Standard GAS115H for Solvent Cleaner/Degreaser, Mixed Hydrocarbons, Part No. GAS115H1 • ASTM F-945, F-1110, F-502, F-519, F-485, F-483
BIOACT® 280 <i>Semi-Aqueous</i>	Immersion	<ul style="list-style-type: none"> • Conforms to Honeywell (Allied Signal Engines) EMS 53170 Revision C 10-21-97 Type 1 Material Requirements for Aqueous Cleaning and Semi-Aqueous Degreasing, Tests A,B,C,F,G • Approved by GE Aircraft Engines (Dallas, TX) as a General Parts Cleaner & Plating Wax Remover on GEAE & CFMI Engine Hardware • Supported by Hawker Pacific Aerospace, UK, Ltd. as a General Purpose High Temperature Degreasing Agent • Approved by Pratt & Whitney MCL E-205 Titanium Stress Corrosion Test • Approved by Pratt & Whitney Commercial Standard Practices Manual SPOP 37 Method 2; PMC 8913-1,-2 Revision C (SPM Rev 120, Part #585005) • Approved by Rolls-Royce CSS No. 254 Class A Semi-Aqueous Cleaning Fluids Suitable or Use on Metallic Materials (reference specs MLC104, CSS200, CSS253, RPS461, RPS498) • Approved by Rolls-Royce CSS No. 255 Type A Non-Halogenated Organic Solvent Cleaner Suitable or Use on Metallic Materials (reference specs MLC104, CSS200, CSS253, RPS578) • Approved by Rolls-Royce OMat 1/288D Wax Remover • ASTM F-1110, F-945, F-519

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BIOACT® 280E <i>Semi-Aqueous</i>	Immersion	<ul style="list-style-type: none"> • Conforms to Boeing D6-17487 Revision N Exterior and General Cleaners and Liquid Waxes, Polishes and Polishing Compounds (exceptions: ASTM F-484 Stress Cracking Tests on Acrylic Plastics, Type C) • Approved by CFM PCN No. 2007/00123 V1.B, CFM56 Engines • Conforms to Pratt & Whitney PWA 36604 Revision B Hot Corrosion Testing of Standard Gas Turbine Engine Alloys, Alloys AMS 5544, 5536, 5608, 5508, 6359, 4037, 4375 • Approved by Pratt & Whitney Commercial Standard Practices Manual SPOP 37 Method 2; PMC 8913-11,-12 Revision C (SPM Rev 120, Part #585005) • ASTM F-945, F-502, F-519-93, F-1110, F-2111, SAE ARP 1755B
BIOACT® 288 <i>Semi-Aqueous</i>	Immersion	<ul style="list-style-type: none"> • Conforms to Pratt & Whitney PWA 36604 Revision (exceptions: AMS 7267 Compatibility with Non-Metallic Materials) • Approved by Pratt & Whitney Commercial Standard Practices Manual SPOP 37 Method 2; PMC 8913-21,-22 Revision C (SPM Rev 120, Part #585005) • Approved by Rolls-Royce OMat 1/288E Wax Remover • Conforms to Rolls-Royce CSS No. 253 Test No. 4, Low Temperature Corrosivity • ASTM F-945, D-816, SAE ARP 1755B
RE-ENTRY® PREPSOLV <i>Solvent</i>	Hand-wipe Immersion	<ul style="list-style-type: none"> • Approved by Boeing BAC 5750 Section 5.1s (as Glidsafe Prepsolv by Glidco: former manufacturer) • Approved by Boeing BAC 5000 General Sealing, Revision W, 17-JAN-2000 (as Glidsafe Prepsolv by Glidco: former manufacturer) • Approved by the Department of the Navy WS 26024d Terpene Solvent, Ultra Low Residue for Use in Cleaning & Degreasing the Trident II D/5 First & Second Stage Motors (OWUAS) • ASTM D-1353 Non-volatile Residue Test
RE-ENTRY® PLUS 4 <i>Solvent Blend</i>	Hand-wipe Immersion	<ul style="list-style-type: none"> • Approved by the Department of the Navy WS 26145c Terpene Blend Solvent, Ultra Low Residue for use in Cleaning & Degreasing Operations for Solid Rocked Motor Components • ASTM D-1353 Non-volatile Residue Test • NSN# 6850014356461
LENIUM® GS <i>nPB-based</i>	Vapor Degreasing	<ul style="list-style-type: none"> • Approved by Scott Aviation SMP No.: 7700009 Revision AP, Cleaning of Components & Assemblies For Sale Use in Breathing Equipment • ASTM F-519, F-1110, F-945
LENIUM® ES <i>nPB-based</i>	Vapor Degreasing	<ul style="list-style-type: none"> • Approved by Goodrich Landing LGPS 1400 Solvent Cleaning/Degreasing
LENIUM® XS <i>nPB-based</i>	Vapor Degreasing	<ul style="list-style-type: none"> • Conforms to Boeing D6-17487 Revision P Solvent Cleaners/General Cleaning • Conforms to Douglas CSD #1 Type 1 General Purpose Cleaner (exceptions: Stress Cracking Test on Acrylics Plastics) • ASTM F-519, F-1110, F-502, F-945, F-485, F-483, SAE ARP 1755B
AXAREL® 1000 <i>Solvent</i>	Hand-wipe Immersion	<ul style="list-style-type: none"> • Approved under MIL-PRF-680B Degreasing Solvent Type I Low Flash Point (Military Symbol SD-1) • ASTM D-1353, D-1296, D-130, F-1110, F-483, F-945 • NSN# 6850-01-474-2309/2313

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Products	Application	Approvals/Test Method Conformance
AXAREL® 2000 <i>Solvent</i>	Immersion Hand-wipe	<ul style="list-style-type: none"> Approved under MIL-PRF-680B Degreasing Solvent Type II High Flash Point (Military Symbol SD-2) ASTM D-1353, D-1296, D-130, F-1110, F-483, F-945 NSN# 6850-01-474-2317/2316
AXAREL® 4100 <i>Solvent Blend</i>	Immersion	<ul style="list-style-type: none"> Approved by Rolls-Royce CSS No. 255 Non-Aqueous Cleaning Fluids for Cold Liquid Degreasing Applications (reference spec RPS576) NSN# 8010015350740
AXAREL® 6100 <i>Solvent Blend</i>	Immersion	<ul style="list-style-type: none"> Approved by Bell Helicopter, Bulletin No. 1915, Solvents, Blended Organic, Cold Degreasing Approved by Goodrich Actuation Systems 981-100-020 Issue 4 Solvent Degreasing Approved by Rolls-Royce CSS No. 255 Type A Non-Halogenated Organic Solvent Cleaner (reference specs CSS200, CSS253, RPS578)
AXAREL® 9100 <i>Solvent Blend</i>	Immersion	<ul style="list-style-type: none"> Approved under MIL-PRF-680B Degreasing Solvent Type III Very High Flash Point (200°F) Military Symbol SD-3 Approved by Rolls-Royce CSS No. 255 Type A Non-Halogenated Organic Solvent Cleaner (reference specs CSS200, CSS253, RPS578) Rolls-Royce Plc. Assessment (1993/94) Conforms to Royal Air Force Harrogate Montreal Protocol Alternatives Programme Replacement for Ozone Depleting Substances (1995) ASTM D-1353, D-1296, D-130, F-1110, F-483, F-945 NSN# 6850-01-474-2320/2321
AXAREL® 52 <i>Semi-Aqueous</i>	Immersion Spray	<ul style="list-style-type: none"> ASTM F-945 Stress Corrosion of Titanium Alloys by Aircraft Engine Cleaning Materials (Method A); Titanium AMS 4911, 4916
AXAREL® 56 <i>Semi-Aqueous</i>	Immersion Spray	<ul style="list-style-type: none"> Approved by Boeing BAC 5200 Cleaning, Preserving & Re-lubricating Anti-friction Bearings, Method II A Pressure Spray Cleaning, PSD 6-3 Approved by Boeing BAC 5763 Type II Aqueous Alkaline & Solvent/Emulsion Degreasers Supported by Hawker Pacific Aerospace, UK, Ltd. as a Diphase Cleaning/Degreasing Chemical ASTM F-519
CleanSafe™ 787 <i>Aqueous</i>	Immersion Spray	<ul style="list-style-type: none"> Approved by Boeing BAC 5763 Type II Grade A Emulsion Cleaning & Aqueous Degreasing, PSD 6-52
CleanSafe™ 787C <i>Aqueous</i>	Immersion Spray	<ul style="list-style-type: none"> Approved by Boeing BAC 5763 Type II Grade A Emulsion Cleaning & Aqueous Degreasing, PSD 6-57 Conforms to GE Appendix F Recommended Practice for Certifying Agent Approval of Cleaning Products Used on Metallic Jet Engine Hardware (Sections 3.1.1, 3.1.4, 3.1.5, 3.1.6, 3.1.9, 3.1.10, 3.1.12) Conforms to MIL-PRF-87937D Cleaning Compound, Aerospace Equipment Type IV – Heavy Duty, Water-Dilutable Cleaning Compound Conforms to Pratt & Whitney PWA 36604 Revision D Hot Corrosion, Stock Loss, Stress Corrosion, Compatibility with Non-Metallic Materials, Compatibility with PWA 407 Rubber Approved by Rolls-Royce OMat 1/24AL Aqueous Cleaner Approved by the SCAQMD as a Clean Air Solvent. ASTM F-519, F-483, D-816, F-945, F-1111, F-1110, F-502, F-483, Wet Adhesion Tape Test, MIL-DTL-83488d, AE ARP 1755B

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Products by Company

Company	Approved Products	Conforming Products
Bell Helicopter	BIOACT 105, AXAREL 6100	
Boeing Company	RE-ENTRY PREPSOLV, AXAREL 56, CleanSafe 787, CleanSafe 787C	BIOACT 105, BIOACT 121, BIOACT 145, BIOACT PCG, BIOACT 280E, LENIUM XS
CFM	BIOACT 105, BIOACT 280E	
Douglas Aircraft Co.	BIOACT 105	BIOACT 121, BIOACT 145, LENIUM XS
General Electric	BIOACT 105, BIOACT 280	CleanSafe 787C
Goodrich Actuation Systems	AXAREL 6100	
Goodrich Landing Gear	LENIUM ES	
GulfStream Aerospace	BIOACT 105, BIOACT 145	
Honeywell (Allied Signal)		BIOACT 280
Lockheed Martin	AXAREL 9100	
Military	RE-ENTRY PREPSOLV, RE-ENTRY PLUS 4, AXAREL 9100, AXAREL 2000, AXAREL 1000	AXAREL 9100, CleanSafe 787C
Pratt & Whitney	BIOACT 105, BIOACT 280, BIOACT 280E, BIOACT 288	CleanSafe 787C
Rolls-Royce	BIOACT 105, BIOACT 280, BIOACT 288, AXAREL 4100, AXAREL 6100, AXAREL 9100, CleanSafe 787C	
Scott Aviation	LENIUM GS	
United Airlines	BIOACT 105	

Petroferm Inc. has satisfied customers in the aerospace industry in over 18 countries around the world. Below are the names of some of these customers.

Air Andaman, AMECO, ATK Thiokol, AVOX, BAE Systems, Boeing, Bell Helicopter, CAE Electronics, China Air, Chromalloy, Dowty Propellers, GE Aircraft Engines, Goodrich, Hawker Pacific, Hindustan Aeronautics, Honeywell, IHI Aerospace, Intersil/Harris, Israeli Aircraft Industries, Israeli Air Force, JAMCO, Kawasaki Heavy Industry, Korea Aero, Lockheed Martin, Lufthansa, L-3 Corporation, Martin Baker, Messier Services, Mexicana Airlines, Mitsubishi Heavy Industries, NASA, Northrop Grumman, Northwest Airlines, Pratt and Whitney, Rockwell Collins, Rolls Royce, Shimadzu, Sifco, Smiths Industries, Snecma, SR Technics, Standard Aero, Sundstrand, Tactair Fluid Controls, Talla-Com, Thai Airways, Thai Aviation, United Airlines, United States Military, Volvo Aerospace, Weston Aerospace

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