






# Surface Treatment Technologies

Solutions for every surface – Vantage has you covered.

-  Removal Products
-  Cleaning & Degreasing Solutions
-  Surface Pretreatments





### **Why Vantage?**

With over 40 years of experience manufacturing coating removers, cleaning solutions and surface treatments, Vantage's Surface Treatment team is backed by a parent company focused on investing and growing its 10 global manufacturing locations, 1000+ employees and 19 global commercial locations.

### **What matters most?**

Our commercial sales team is accessible and knowledgeable and ready to guide you in choosing the best solution for your project. Our dedicated customer service representatives support end-to-end order fulfillment insuring your product arrives on time and in full. As a team, we can help you meet and exceed industry standards for quality, health, safety and the environment.

### **Where do we participate?**

We are engaged at multiple levels within the aerospace and defense community and currently hold 300+ A&D OEM product approvals. A complete range of nose-to-tail qualified surface treatment solutions including cleaning, coating removal and pretreatment products are developed and manufactured at our 15-acre site in Gurnee, Illinois.

### **How quickly can we help you?**

An experienced technical support function can assist our customers with onsite start-up assistance, operator training, optimization programs, and troubleshooting. Furthermore, we have access to a global network of stocking locations with made-to-stock positions on many of our products for quick and efficient turnaround.

### **What makes our products different?**

Our ISO 9001 Certified manufacturing site is home to our QC and QA departments who ensure product quality and consistency with each batch. In-house compliance and regulatory expertise means we are informed on the latest EHS trends and consistently working with our technical teams to provide safer alternatives.

### **What is it like to work with us?**

Our leadership team has empowered our employees to make decisions with our customers' best interest in mind. Through a process-driven and collaborative approach, we believe it is possible for us to win together.

# Removal Products

## Aircraft Paint Removers

<b>B&amp;B™ 9095</b> Aircraft Paint Remover	Viscous, low-odor hydrogen peroxide activated paint remover designed to remove epoxy primers, polyurethane topcoats, poly-sulfides, belly tape, and other coatings from exterior aircraft surfaces. Clings to vertical and inverted surfaces. 18-month shelf life. Military Approved.	TO 1-1-8, TO 1-1-24, MIL-PRF-32587, C-130 LES, Boeing DPM 5549, Boeing BMS 10-144, Boeing DPS 9.316-3, Boeing D6-17487 (BSS 7432), Douglas CSD #1, Tinker AFB QPL Purchase Description OC-LC-2009-01, Lockheed Martin C-130 NTO, RAF NTO, Lockheed Martin EMAP G32.2356, Piper Aircraft Company
<b>B&amp;B 3095</b> Aircraft Paint Remover	Thickened, low odor hydrogen peroxide activated paint remover effective on epoxy primers, base coats, clear coats, and other paint systems from exterior aircraft surfaces. Clings to vertical and inverted surfaces. 18-month shelf life. Conforms to key commercial OEM specifications.	United Airlines, SAE MA4872A, Boeing D6-17487 (BSS7432), Douglas CSD #1, ASTM F 519, ASTM F 483, ASTM F 1110, ASTM F 1080, Corrosion Test for Dissimilar Metals, Al/Cad Plate, Al/Ti, Ti/Cad Plate, Ti/Mg, Embraer MEP 21-016
<b>APR™ 2260</b> Aircraft Paint Remover	Safe, versatile paint remover designed for easy spraying off aircraft exterior surfaces. 12-month shelf life.	Boeing D6-17487 (BSS7432), Douglas CSD #1, SAE MA4872A, ASTM F483, ASTM F519, Dissimilar Metal Corrosion Test (Al/Steel, Al/St Cad Plate, Al/Ti, Ti/St, Ti/Mg, Al/Mg), Residue Corrosion Test ( Al/Steel, Al/St Cad Plate, Al/Ti, Ti/St, Ti/Mg, Al/Mg)
<b>IPR™ 9323</b> Immersion Paint Remover	Heated immersion paint remover for aircraft wheels, landing gears, and other aircraft components. Lower heating requirements (130-160F/54-71C). Excellent replacement for products contains NMP, MeCl, and caustic paint removers. EU REACH complaint. Contains no US EPA HAPs.	MIL-PRF-83936C Type I, AMS 1375, Boeing BSS 7432, Douglas CSD#1
<b>B&amp;B 9201</b> Immersion Paint Remover	Heated immersion paint remover for aircraft wheels, landing gears, and other aircraft components. Does not contain nMP. Uses an oil seal to safeguard against evaporative loss.	MIL-PRF-83936C Type I
<b>Additive O</b> Mineral Oil Seal	Mineral oil seal added to bath containing IPR 9323 or B&B 9201. Oil seal layer lowers odor and safeguards against evaporative loss.	

## Wax, Coating & Sealant Removers

<b>B&amp;B 5151-B</b> Polysulfide Sealant Remover	Gelled solution formulated to remove polysulfide sealants and coatings from aircraft structures. Does not contain nMP. Removes 3M, Royal, Flamemaster sealants.	Boeing D6-17487 (BSS7432) (B), Douglas CSD #1 (B), TO 1-1-8 (B)
<b>BIOACT 108</b> CIC Remover	Solvent cleaner designed to remove corrosion inhibited compounds (CICs). Effectively cleans Cor-ban® 23 & 35, ARDROX® AV-8 and other difficult-to-remove soils.	American Airlines, Boeing BAC 5750 & BAC 5355, Airbus AIMS 09-00-002, SAE AMS 1526C, Boeing D6-17487 (BSS 7432), Douglas CSD #1
<b>BIOACT 145</b> CIC Remover	Non-citrus CIC remover and general solvent cleaner for oils, greases, hydraulic fluids. Flash point above 140°F (60°C). May be used in confined areas such as bilges and equipment bays.	Airbus AIMS 09-00-002, American Airlines, Boeing D6-17487(BSS 7432), Douglas CSD #1, Gulfstream
<b>BIOACT 280/E</b> Wax Remover	Bio-based cleaner for masking wax and fixturing compounds. 18-24+ month bath life. Replaces perchloroethylene (PERC), trichloroethylene (TCE), and hot oil products.	Boeing D6-17487 (BSS 7432), CFM, GE Aviation, Honeywell, IAE, Pratt & Whitney PMC 8913, Rolls-Royce CSS/OMat, United Airlines, Williams International
<b>BTR-130</b> Belly Tape Remover	Thickened, sprayable solution formulated to remove protective belly tape from aircraft surfaces.	Pending - Boeing BSS 7432 (formerly D6-17487), Douglas CSD #1
<b>iTPC™ Remover 37</b> Temporary Protective Coating Remover	Mild alkaline cleaner formulated to remove strippable temporary protective coatings (TPCs). Contains corrosion inhibitors. Low VOCs.	SAE AMS 7202



# Cleaning & Degreasing Solutions

## Aircraft Exterior & Interior Cleaners

<b>B&amp;B™ JET-7</b> Exterior Cleaner	Ready-to-use liquid aircraft exterior cleaner for dirt, grime, light oil, and hydraulic fluid e.g. Skydrol®. Military Approved.	MIL-PRF-87937 Type IV, Airbus AIMS 09-00-002, Boeing D6-17487(BSS 7432)
<b>B&amp;B JET-22C</b> Exterior Cleaner	Water-based exterior aircraft cleaner selected to remove dirt, grime, oils, hydraulic fluid (e.g. Skydrol®) and other soils. B&B JET-22C is also suitable for use in confined areas such as bilges and equipment bays. Ready to use or diluted with water.	Airbus AIMS 09-00-002, Boeing D6-17487 (BSS 7432),Douglas CSD #1, SAE AMS 1526C
<b>B&amp;B CONTACT X</b> Exterior Cleaner	Low abrasive dry wash solution designed to remove oils, greases, hydraulic fluid, stains and other soils from painted and unpainted surfaces. spot cleaner for thrust, smoke trail, and rocket blast areas.	MIL-PRF-85570 Type III
<b>B&amp;B CONTACT XL</b> Aircraft Dry Wash	Wipe-on, wipe-off dry wash solution for aircraft exteriors. Rejuvenates paint. Reduces soil redeposition.	American Airlines, Boeing D6-17487 (BSS7432), United Airlines
<b>B&amp;B RE-GEL</b> Exterior Cleaner	Gel-type aircraft exterior cleaner. Qualified to MIL-PRF-87937. Clings to inverted and vertical surfaces including wheel wells and undercarriage areas.	MIL-PRF-87937 Type III, Airbus AIMS 09-00-002, Boeing D6-17487 (BSS7432)
<b>B&amp;B 8525</b> Exterior Cleaner	Concentrated, heavy-duty military aircraft wet wash built with enhanced corrosion inhibitors. It is excellent for removing moderate to heavy soils including hydraulic oils, greases, and corrosion inhibiting compounds (CICs). Military Approved.	MIL-PRF-85570 Type II, Boeing D6-17487 (BSS7432)
<b>B&amp;B 1995</b> Exterior Cleaner	Concentrated gel-type aircraft exterior cleaner for heavy soils. Clings to inverted and vertical surfaces including wheel wells and undercarriage areas. Military Approved.	MIL-PRF-85570 Type V
<b>AIC-100</b> Interior Cleaner	General purpose aqueous cleaner for interior surfaces. Safe on polymer, elastomers, sealants, painted and metallic surfaces, fabric, carpet, leather and Naugahyde. Low VOCs. EU rEACH compliant.	Airbus AIMS09-00-002, Boeing BSS 7434, Boeing D6-17487, Douglas CSD #1, AMS 15550A
<b>B&amp;B ODOR OUT</b> Deodorizer	Deodorizer for aircraft cabin interiors.	American Airlines, United Airlines
<b>B&amp;B SPARKLE A</b> Windshield Cleaner	Non-streaking, water-based windshield cleaner. Safe and effective on glass and acrylics.	

## Parts & Component Cleaners

<b>AXAREL™ 2000</b> Solvent Cleaner	Used for manual and immersion cleaning and degreasing. Very low odor. Safe and effective replacement for mineral spirits. Flash point above 140°F (60°C). Military Approved.	MIL-PRF-680 Type II, Airbus CML (08BBB1), Airbus A330 AMM American Airlines, Boeing BAC 5750, Embraer, GE Aviation, Honeywell, Lockheed-Martin, Messier-Bugatti, Pratt & Whitney, Rolls-Royce, United Airlines, UTAS
<b>AXAREL 3000</b> Solvent Cleaner	Used for immersion cleaning and degreasing. Very high flash point (>200°F/93°C). It removes mineral oils, lubricants, coolants, synthetics, waxes and particulate matter. Safe for use with ferrous and non-ferrous alloys. Military Approved	MIL-PRF-680 Type III, Airbus CML (08BBB1), Airbus A330 AMM, Boeing BAC 5750, Honeywell, Lockheed-Martin, Messier-Bugatti, Embraer, Pratt & Whitney, UTAS
<b>AXAREL 56</b> Solvent Cleaner	Water-rinsible solvent cleaner for heated immersion equipment. Removes greases, heavy soils.	Boeing BAC 5200 & BAC 5763, GE Aviation, Messier-Dowty
<b>AXAREL PD-680-II</b> Solvent Cleaner	PD-680 Type II solvent. Used for manual and immersion cleaning. Removes a wide range of soils such as greases, mineral oils, lubricants, coolants, and synthetics	A-A-59601E Type II (PD-680 CID), Airbus CML (08BBB1)

## Cleaning & Degreasing Solutions

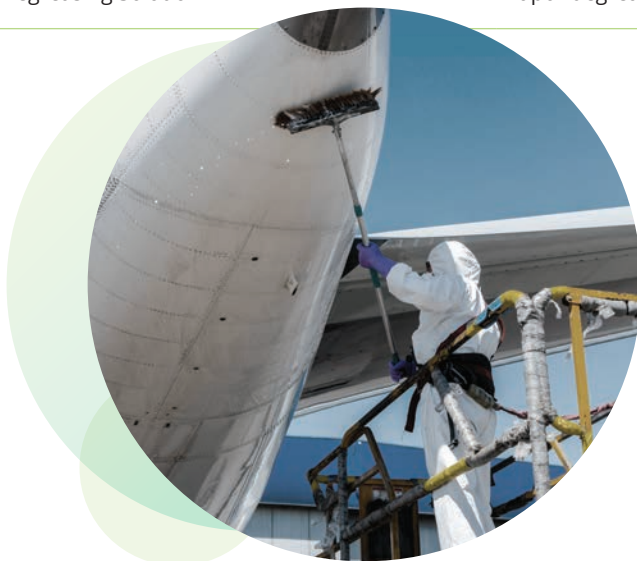
<b>B&amp;B TC-100</b> Aqueous Cleaner	Aqueous immersion cleaner for aircraft heat exchangers. Also used for gas path turbine engine cleaning.	MIL-C-85704 Type II, Airbus (Application Code 08AJA9/869200), Airbus AIMS 09-00-002, Boeing D6-17487 (BSS 7432), Boeing APU Prop-BN82T-C89-461, Boeing 747 AMM 49-11-00, Boeing 737 AMM, CFM (CP5060), Douglas CSD #1, GE Aviation (C04-140), Honeywell CMM (Heat Exchanger Cleaning), Pratt & Whitney CPMC 79038, Pratt & Whitney Canada EMM, United Airlines, SAE AMS 1550A
<b>CleanSafe™ 686</b> Aqueous Cleaner	Concentrated aqueous solution for immersion and ultrasonic cleaning equipment. Effectively removes difficult soils such as corrosion inhibiting compounds (CICs), drawing and forming compounds, fluorescent penetrants, greases, hydraulic fluids and turbine oils.	Praxair Surface Technologies, Williams International
<b>CleanSafe 787C</b> Aqueous Cleaner	Ultra low-foaming aqueous solution for spray and agitated immersion cleaning equipment. safe for use on ferrous and non-ferrous alloys such as untreated aluminum, alodined and anodized aluminum, carbon steel, copper and copper alloys, stainless steel, titanium and magnesium.	Bell Helicopter, Boeing BAC 5763 & BAC 5749, Boeing Defense Sys HMS20, CFM, Engine Alliance, GE Aviation C04-289, Honeywell, Messier-Dowty PCS-2621, Pratt & Whitney PMC 1465, Rolls-Royce CSS/OMat, Safran In-1500, Spirit AeroSystems, United Airlines, Williams International
<b>LENIUM™ FS</b> Vapor Degreasing Solution	Fluorinated vapor degreasing solution. Alternative to nPB, TCE and PERC. Removes straight hydrocarbon soils, water-soluble soils and flux residues. Does not require acid acceptance testing.	Pending - Boeing BSS 7432 (formerly D6-17487), Douglas CSD #1, Hot Corrosion Testing, SAE ARP 1755B
<b>LENIUM GS</b> Vapor Degreasing Solution	Vapor degreasing solution based on stabilized n-Propyl Bromide (nPB).	Bell Helicopter, Boeing BAC 5408, Embraer, Lockheed-Martin EMAP, Messier-Dowty, Praxair, Safran In-1500, Scott Aviation, UTAS LGPS 1400, Williams International
<b>On-Wing Engine Cleaners</b>		
<b>B&amp;B 3100</b> Gas Path Cleaner	Concentrated solvent cleaner for gas path, compressor and fuel nozzle cleaning in portable or stationary turbine engines. Military Approved.	MIL-PRF-85704 Type I, Boeing 737 AMM, CFM, GE Aviation, Pratt & Whitney Canada EMM, Williams International
<b>B&amp;B TC-100</b> Gas Path Cleaner	Aqueous gas path cleaner for turbine engines. Effective in cleaning compressor blades, stators, air passages, etc. in turbine engines. Military and Commercially Approved.	MIL-C-85704 Type II, Airbus (Application Code 08AJA9/869200), Airbus AIMS 09-00-002, Boeing D6- 17487 (BSS 7432), Boeing APU Prop- BN82T-C89-461, Boeing 747 AMM 49-11-00, Boeing 737 AMM, CFM (CP5060), Douglas CSD #1, GE Aviation (C04-140), Honeywell CMM (Heat Exchanger Cleaning), Pratt & Whitney CPMC 79038, Pratt & Whitney Canada EMM, United Airlines, SAE AMS 1550A
<b>B&amp;B TC-100N-3</b> Gas Path Cleaner	Aqueous gas path cleaner for turbine engines. Qualified for both on and off-line cleaning of the compressor section. Military Approved.	MIL-PRF-85704 Type II & Type III, Airbus (Application Code 08AJA1), American Airlines, Boeing 737 AMM, GE Aviation, Honeywell CMM (Heat Exchanger Cleaning), United Airlines
<b>B&amp;B TC-100N-3-RTU</b> Gas Path Cleaner	Ready-To-Use (RTU) aqueous gas path cleaner for turbine engines. Qualified for both on and off-line cleaning of the compressor section. Military Approved.	MIL-PRF-85704 Type II RTU & Type III RTU, Airbus (Application Code 08AJA1), GE Aviation
<b>Manual Cleaners</b>		
<b>AXAREL 1000</b> Solvent Cleaner	Solvent degreaser designed for hand wiping, immersion applications and use in airless vacuum hydrocarbon equipment to leave substrates with very low surface residues while effectively removing a wide range of soils such as greases, mineral oils, lubricants, coolants, synthetics, and particulate matter. Essentially no odor. Moderate dry times. Military Approved.	MIL-PRF-680 Type I, Airbus CML (08BBB1), American Airlines, Boeing BAC 5750, Embraer, Honeywell, Lockheed-Martin, Pratt & Whitney, Rolls-Royce, United Airlines, GE Aviation, Airbus A330 AMM
<b>AXAREL 2000</b> Solvent Cleaner	Solvents cleaner can be used for cleaning prior to inspection (NDT), packaging, final assembly of component parts, maintenance operations, general purpose cleaning and degreasing, surface preparation prior to bonding, painting, plating, sealing, welding or further processing of parts. Compatible with many polymeric substrates, elastomers and is safe for use with ferrous and non-ferrous alloys. Essentially no odor. Flash point above 140°F (60°C). Used for manual and immersion cleaning. Military Approved.	MIL-PRF-680 Type II, Airbus CML (08BBB1), Airbus A330 AMM, American Airlines, Boeing BAC 5750, Embraer, GE Aviation, Honeywell, Lockheed-Martin, Messier-Bugatti, Pratt & Whitney, Rolls-Royce, United Airlines, UTAS

# Cleaning & Degreasing Solutions

<b>AXAREL 4000</b> Solvent Cleaner	MIL-PRF-680 Type IV solvent degreaser. Used when a higher flash point (>140°F/60°C) and strong solvency is desired. Mild citrus odor.	MIL-PRF-680 Type IV, Airbus CML (08BBB1), Airbus A330 AMM, Boeing BAC 5750, Embraer, GE Aviation, Honeywell, Lockheed-Martin
<b>AXAREL PD-680-II</b> Solvent Cleaner	General purpose solvent degreaser for manual and immersion cleaning. Conforms to A-A-59601E.	A-A-59601E Type II (PD-680 CID). Airbus CML, Williams International
<b>BIOACT 105 &amp; BIOACT 105 Wipes</b> Solvent Cleaner	Qualified solvent cleaner used to replace IPA, MEK, acetone, and other hazardous solvents for general purpose degreasing and surface preparation. Low EHS impact. Available in liquid and pre-saturated wipes.	SAE AMS 3167, Airbus AIMS 09-00-002, American Airlines, Bell Helicopter, Boeing D6-17487 (BSS 7432), Douglas CSD #1, Bombardier BAPS 180-009 General & Q400 AMM, CFM, GE Aviation, Gulfstream, Honeywell, IAE, Pratt & Whitney PMC 8929, Rolls-Royce CSS/OMat, United Airlines, AMS 1526, AMS 3819 (BIOACT 105 Wipes)
<b>BIOACT 108</b> Solvent Cleaner	Solvent cleaner for Corrosion Inhibiting Compounds (CICs) e.g. Cor-ban® 23 & 35, ARDROX® AV-8. Also removes hydraulic fluids e.g. Skydrol®, adhesive residues and other soils. Excellent MEK replacement.	Airbus AIMS 09-00-002, American Airlines, Boeing BAC 5750 & BAC 5355, Boeing BMS11-14A, Boeing D6-17487 (BSS 7432), Douglas CSD #1, AMS 1526C
<b>RE-ENTRY™ Prepsolv</b> Solvent Cleaner & Adhesive Remover	Citrus-based manual cleaner for adhesive residues, hydraulic fluids, and CICs.	Boeing BAC 5750

## Avionics Cleaners

<b>AXAREL 2200</b> Solvent Cleaner & Defluxer	Multi-purpose manual cleaner and defluxer for stencils & PCBs. Safe and effective replacement for isopropyl alcohol (IPA). Eliminates white residues.
<b>BIOACT EC-78</b> Batch Spray Defluxer	Aqueous defluxer for batch spray cleaning equipment
<b>BIOACT EC-88</b> Ultrasonic Spray Defluxer	Low-foaming PCB defluxer for inline spray equipment. Designed for high throughput operations and hard-to-clean flux residues.
<b>BIOACT EC-98</b> Ultrasonic Spray Defluxer	Aqueous ultrasonic and immersion PCB defluxer
<b>BIOACT SC-10</b> Solvent Cleaner & Defluxer	Citrus-based manual defluxer for PCBs. Also effectively removes adhesive residues and acrylic-based conformal coatings.
<b>HYDREX™ EMC-44</b> Oven & Wave Solder Cleaner	Electronics maintenance cleaning solution designed to remove flux residues, greases and other soils in reflow ovens, wave solder machines, and pick-and-place systems.
<b>HYDREX EMC-86</b> Immersion Pallet Cleaner	Electronics maintenance cleaning solution designed to clean wave solder pallets in soak, agitated immersion, and ultrasonic cleaning systems.
<b>HYDREX SC-30 RTU</b> Underwipe Cleaner	Ready-To-Use stencil underwipe cleaner. Nitrogen & Phosphorous free. Safe and effective alternative to IPA.
<b>LENIUM ES</b> Vapor Degreasing Solution	Stabilized n-Propyl Bromide (nPB) solution designed to remove flux residues in vapor degreasing equipment.



# Surface Pretreatments



## Wax Maskants

**AEROWAX™ HT**  
Wax Maskant High melt point masking wax used for selective plating operations. 180-190°F (82-88°C) melt point range

**AEROWAX MT**  
Wax Maskant Medium melt point masking wax used for selective plating operations. 168-180°F (76-82°C) melt point range. Pratt & Whitney PMC 9551 Masking Wax Compound, PWA 36604 Revision D Stress Corrosion

## Surface Pretreatments

**iSAP™ 311**  
Inhibited Surface Adhesion Promoter Inhibited surface adhesion promoter engineered to clean and protect aircraft surfaces prior to painting. Non-Chromated. Functions with both chromated and non-chromated paint systems Boeing BSS 7432 (formerly D6-17487, Douglas CSD #1, ASTM D3359, ASTM F1111, ASTM F484, ASTM F502, ASTM F519, ASTM F485, ASTM F483

**PCR™ 1640**  
Prepaint Corrosion Remover Acid etching solution for aluminum surfaces. Conforms to SAE AMS1640. Removes corrosion and prepares aircraft surfaces prior to conversion coating, painting, anodizing, or welding. Does not contain hydrofluoric acid. SAE AMS 1640C (Supersedes MIL-C-38334), Corrosion Removing Compound for Aircraft surfaces

## Descaler

**ScaleSafe™ 9430**  
Descaler Mild acid liquid descaler to remove mineral deposits and other scale from the wetted surfaces of aqueous washers such as spray nozzles, heating elements, belts, screens, viewing windows, and tank surfaces.

## Corrosion Inhibitor

**RustSafe™ 2400**  
Corrosion Inhibitor A solvent based, water displacing corrosion inhibitor designed to rapidly separate from typical water based solutions used in machining operations or cleaning systems.







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