



AquaVantage® 815 GD

The Cleaning Standard In Immersion & Ultrasonic Detergents

PRODUCT BENEFITS AND PROPERTIES

AquaVantage 815 GD is developed for soil removal during the manufacturing or rebuilding of precision components in immersion, mildly agitated or ultrasonic cleaning processes. Mildly alkaline solution which cavitates in ultrasonics with unparalleled performance providing a water-break-free surface. Safe on virtually all metals. AquaVantage 815 GD is noncorrosive and will not stain metals.

Benefits

- RoHS Compliant
- Extends Bath Life – Reduces Costs
- In-Process Corrosion Control
- Transmits Ultrasonic Cavitation at All Temperatures – Significantly Improved Soil Removal
- Free Rinsing – Permits Improved Adhesion
- Reduced Cleaning Rework & Rejects
- Separates Oil Effectively for Improved Oil Removal

INDUSTRY APPROVALS & CONFORMANCE

- **Airbus:** AIPI 09-01-003 Approved Alkaline Cleaner
- **Airbus:** CML, 08AKB1
- **Airbus UK:** ABP 8-1290; Approved Alkaline Cleaner
- **American Eurocopter:** AEC QA-DCR/10-06/01
- **Boeing:** BAC 5749; Alkaline Cleaning*
- **Boeing:** BAC 5753; Cleaning, Descaling, and Surface Preparation of Titanium and Titanium Alloys
- **Boeing:** BAC 5763; Emulsion Cleaning*
- **Boeing:** HP 9-25; Degreasing
- **Boeing (McDonnell Douglas):** DPM 6373
- **Boeing (McDonnell Douglas):** DPS 9.341-1
- **Boeing (McDonnell Douglas):** P.S. 12024; Cleaning, Aqueous Immersion Degreasing
- **Bombardier Aerospace:** BAPS 180-040; Aqueous Degreasing
- **Bombardier (de Havilland):** PPS 31.04, Issue 21, Aqueous Degreaser
- **Ford:** Tox #150887
- **UTC Aerospace Systems (Rohr):** ML 21304; Brake & Wheel Components
- **UTC Aerospace Systems (Rohr):** RMS 1533
- **UTC Aerospace Systems (Rohr):** RPS 17.23 Rev. AE; Metal Prep for Adhesive Bonding
- **Honeywell:** Component Maintenance Manual (Fuel controls)
- **Honeywell:** Standard Practices Manual
- **International Aero Engines:** V2500 Overhaul Processes and Consumables Index; CoMat 01-487
- **Lockheed Martin:** EPS G32.016
- **Lockheed Martin:** LMA-PG006, Rev B
- **Lockheed Martin:** STP-57301; Aluminum Cleaning
- **Meggitt Aircraft Braking Systems -** Fulfills Standard Practices Manual AP-842 (32-46-35) when used and maintained according to BHC guidance.
- **National Aeronautics and Space Administration:** Procedures for Cleaning of Systems and Equipment for Oxygen Service
- **Northrop:** C-24
- **Pratt & Whitney:** PMC 1437-1; PS 422 Alkali Cleaner, Immersion
- **Pratt & Whitney:** SPMC 184, SPOP 209 Immersion Tank (oper.1) and Spray-on/ Rinse-off Cleaning (oper. 3); SPS 184
- **Rolls-Royce:** CSS 204 Type A
- **Rolls Royce:** OMAT 1/24S
- **Safran:** PR-1500
- **Sikorsky Aircraft (United Technologies):** SS 8423 Rev 5
- **SNECMA:** CFM56 Manual, CP2597
- **Safran Aero Engines:** DMP 13-300

TEST COMPLIANCE

- **ARP 1755B:** Stock Loss (Cat.10)
- **ASTM F-483:** Total Immersion Corrosion
- **ASTM F-484:** Stress Cracking of Acrylic Plastics
- **ASTM F-485:** Unpainted Aircraft Surfaces
- **ASTM F-502:** Painted Aircraft Surfaces
- **ASTM F-519:** Hydrogen Embrittlement (Type 1c)
- **ASTM F-945:** Titanium Stress Corrosion (AMS 4916 & 4911 Alloys)
- **ASTM F-1110:** Sandwich Corrosion
- **ASTM F-1111:** Low-Embrittling Cadmium Plate
- **Contains No Cyanides or Sulfides**
- **GE Aviation:** CT-882; Solvent Replacement
- **PWA 36604 Rev. D:** Determination of the Effect of Chemical Cleaners on Non-metallic Alloys (O-Rings)
- **PWA 36604 Rev. D:** Hot Corrosion Testing

TANK MAINTENANCE

Proper maintenance of your wash system will ensure the longest possible detergent bath life, the best parts cleaning performance and the optimal assurance against part corrosion.

Bruhin has developed Maintenance Guidelines for Aqueous Detergent Tanks, a comprehensive flow chart to illustrate the process and a step-by-step video to guide you through.

CONCENTRATION VERIFICATION

Bruhin Titration Kit
(Prod. No. XTRKIT)

Sample Size: 5 mL
Titrant: 1.0 N HCl Solution
Indicator: Bromophenol Blue (2 Drops)
Concentration %: Drops Titrant x 0.81

or

Sample Size: 10 mL
Titrant: 1.0 N HCl Solution
Indicator: Bromophenol Blue (3 Drops)
Concentration %: mL Titrant x 0.42

Burette Test Method

Sample Size: 50 mL
Titrant: 0.5 N HCl Solution
pH Endpoint: 3.8
Concentration %: mL Titrant x 1.25

MATERIAL COMPATIBILITY

AquaVantage 815 GD is non-corrosive and non-staining to a wide variety of alloys. Some selected categories of materials compatible with AquaVantage 815 GD include*:

Ferrous Metals: Carbon Steel • Stainless Steel • Steel

Non-Ferrous Metals & Alloys: Aluminum • Cadmium Plating • Chrome Plating • Copper (Alloys & Plating)** • Hastelloy • Inconel • Magnesium & Magnesium Alloys • Monel • Ni-Cad Plating • Nickel, Nickel Alloys & Plating • Titanium & Titanium Alloys

Plastics & Composites: Acrylics • Epoxy Resin • High Density Polyethylene/HDPE • Nitrile Butadiene Rubber • Polypropylene/PP • Polyvinyl Chloride/PVC

Other: Glass • Painted Surfaces

SOILS

AquaVantage 815 GD removes a wide range of organic and inorganic soils. Some categories of soils that can be removed with AquaVantage 815 GD include*:

Buffing Compounds • Carbon • Coolants • Dirt (Particulate) • Fat • Flux • Grease • Inks • Oil (General, Cutting, Drawing Compounds, Forming, Honey, Hydrocarbon, Lubricants, Self-Emulsifying, Silicone/Greases, Sulfur/Chlorinated, Water-Soluble)

*Material compatibility should always be confirmed via testing with specific contaminants under specific cleaning conditions. **Minor discoloration may occur under certain conditions.

USE RECOMMENDATIONS

| | |
|--|---|
| System | Immersion & Ultrasonic Tanks |
| Dilution | 7-30%, typically used at 10% LOX/Breathable Oxygen: 7% to 12% Metal Finishing: 7% to 25% Repair & Overhaul: 7% to 30% |
| Cleaning Temperature Range | 130-170°F (54-77°C), typically used at 140-150°F (60- 66°C) |
| Cleaning Duration | 1-30 minutes: typical parts are clean in 3-10 minutes |
| Rinse Temperature | A heated rinse may improve overall performance. Some OEM process specifications may require a heated rinse. |
| Rinse Water Quality | Recommended conductivity of final rinse water: • Ultra-Clean Applications: < 50 microsiemens • Precision Cleaning: < 500 microsiemens • Gross Cleaning: > 500 microsiemens |
| To avoid spotting, it is best if the parts remain wet between processing stages. | |

TYPICAL CHEMICAL CHARACTERISTICS

| | |
|--------------------|---------------------------|
| Physical Form | Liquid |
| Color | Blue-Green |
| Odor/Fragrance | Mild |
| Viscosity | Water-thin |
| Weight | 8.96 lbs/gal (1.074 g/ml) |
| pH of Concentrate | 12.0 |
| Flash Point (PMCC) | None to boiling |
| Foaming Tendency | Moderate to high |

SHIPPING, STORAGE, DISPOSAL & PREVENTION

Please refer to the Safety Data Sheet for shipping, storage, disposal and prevention guidance.

AVAILABILITY

- 5 Gal (19L)
- 55 Gal (208L)
- 275 Gal Tote (1,041L)

Authorised Brulin Distributor for Australia and New Zealand[®]



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