PRODUCT TECHNICAL DATA SHEET

AquaVantage® 815 GD-NF

High Performance Immersion & Ultrasonic Detergent

AquaVantage 815 GD-NF is a direct replacement for 815 GD. It has been designed for global regulatory acceptance and most importantly provides equivalent cleaning process performance. AquaVantage 815 GD-NF is developed for soil removal during the manufacturing or rebuilding of precision components in immersion, mildly agitated or ultrasonic cleaning processes. Its mildly alkaline solution cavitates in ultrasonics with unparalleled performance providing a water-break-free or higher level surface cleanliness. Safe on virtually all metals. AquaVantage 815 GD-NF is non-corrosive and will not stain metals.

PRODUCT BENEFITS AND PROPERTIES

Benefits

- No REACH SVHC
- 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:** CML, 08AKB1
- **BAE Systems:** Process Specification R10-6024
- **Boeing:** BAC 5749; Alkaline Cleaning
- **Boeing:** BAC 5763; Emulsion Cleaning
- **Bombardier Aerospace:** BAPS 180-040
- **Bombardier Aerospace:** BAPS 180-001 (Rev A)
- **Bombardier (de Havilland):** PPS 31.04, Issue 21, Aqueous Degreaser
- **UTC Aerospace Systems (Rohr):** GSIL 2006-01
- **Meggitt Aircraft Braking Systems -** Fulfills Standard Practices Manual AP-842 (32-46-35) when used and maintained according to Brulin guidance.
- **Messier-Dowty:** PCS-2621 (Pending)
- **National Stock Number:** 05 Size; 6850-01-606-8428
- **National Stock Number:** 55 Size; 6850-01-606-8434
- **Rolls-Royce:** OMAT 1/24S
- **Safran:** PR-1500
- **Safran Group:** CMM 24-30-09
- **Safran Aero Engines:** DMP 13-300

TEST COMPLIANCE

- **ASTM F-1110:** Sandwich Corrosion
- **ASTM F-945:** Titanium Stress Corrosion (AMS 4916 & 4911 Alloys)
- **ASTM F-483:** Total Immersion Corrosion
- **ASTM F-519:** Hydrogen Embrittlement (Type 1c Bare)

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.

Brulin 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

Brulin 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:	3.80
	Concentration %:	mL Titrant x 1.25

MATERIAL COMPATIBILITY

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

Ferrous Metals: Carbon Steel • Stainless Steel • Steel
Non-Ferrous Metals & Alloys: Aluminum • Cadmium Plating • Chrome Plating • Copper (Alloys & Plating)* • Hastelloy • Inconel • Monel • Ni-Cad Plating • Nickel, Nickel Alloys & Plating • Titanium & Titanium Alloys
Plastic & Composites: Acrylics • Epoxy Resin • High Density Polyethylene/HDPE • Nitrile Butadiene Rubber • Polypropylene/PP • Polyvinyl Chloride/PVC
Other: Glass • Painted Surfaces

**Minor discoloration may occur under certain conditions.*

SOILS

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

USE RECOMMENDATIONS

System	Immersion & Ultrasonic Tanks
Dilution	5-30%, typically used at 10%
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
Fragrance	Mild
Viscosity	Water-thin
Weight	8.9 lbs/gal (1.07 g/ml)
pH of Concentrate	12.0 (typical)
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)

Product #: 301017 ***(Formerly Formula 815 GD-NF)***

phone: 317.923.3211 • fax: 317.925.4596 • ISO 9001:2015 CERTIFIED • brulin.com