

# 815 QR

## **Heavy-Duty Immersion & Ultrasonic Detergent**

Aggressive Immersion
Cleaning for the
Heaviest Soils Found
in a Wide Range of
Industries



Immersion & Ultrasonic Detergent Aggressive cleaning for the most tenacious soils, and broad compatibility with steel, aluminum, and most substrates — 815 QR is the ideal detergent for automotive rebuild and other heavy-duty immersion cleaning processes.

Heavy-Duty Cleaning

Cleans stubborn greases, carbon and other difficult soils on steel, aluminum and most common substrates

#### **Benefits**

- Independent Performance Documentation Proven Quality Results
- Water-Based, Dilutable Formulation For Environmental Safety & Economy of Use
- Extends Bath Life Creates Labor Savings & Reduces Costs
- In-Process Corrosion Control
- Transmits Ultrasonic Cavitation at All Temperatures
- Free Rinsing Cleaner Parts & Simplified Cleaning

#### **Greener 12 Ways**

More user and environmentally friendly, reducing costly paperwork

- 1. No SARA Title III, Section 313 Reportable
- 2. No Ozone Depleting Substances
- 3. No Global Warming Potential
- 4. No CERCLA Reportable
- 5. No RCRA Reportable Ingredients
- 6. Low Caustic
- 7. No Glycol Ethers
- 8. No Chelants
- 9. No Butyl
- 10. Recycles Easily
- 11. Biodegradable
- 12. RoHS Compliant

#### **Industry Approvals & Conformance**

- Ford: Tox #037377
- GM: FID Number 236998
- National Stock Number: 07 Size; 6850-01-423-1105
- National Stock Number: 55 Size; 6850-01-394-2619
- . Rolls Royce (Allison Engine): 250-C30 Series, Operations and Maintenance Manual; Cleaning Fuel Nozzles
- USDA C1 (LG)

#### **Test Compliance**

- ARP 1755A: Stock Loss (Special Test; No Classification)
- ARP 1795A: Stress Corrosion of Titanium Alloys (4911)

### **Performance Properties**

#### **Substrates**

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

Ferrous Metals: Carbon Steel • Stainless Steel

Non-Ferrous Metals & Alloys: Aluminum • Chrome Plating • Magnesium & Magnesium Alloys

• Titanium & Titanium Alloys

Plastic & Composites: High Density Polyethylene/HDPE • Nitrile Butadiene Rubber • Polyvinyl Chloride/

#### Soils

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

Buffing Compounds • Carbon • Coolants • Dirt (Particulate) • Fat • Flux • Grease • Inks • Oils (General, Cutting, Drawing Compounds, Fingerprints, Forming, Honey, Hydrocarbon, Lubricants, Self-Emulsifying, Silicone/Grease, Sulfur/Chlorinated, Water Soluble) • Tar & Pitch • Waxes

\*Material compatibility should always be confirmed via testing with specific contaminants under specific cleaning conditions.

#### **Use Ranges**

System	Immersion Tanks • Ultrasonic Tanks
Dilution	1-15%, typically used at 10%
Temperature Range	130-170°F (54-77°C), typically used at 140°F - 150°F (60-66°C)
Cleaning Duration	1-30 minutes: typical parts are cleaned in 3-10 minutes
Rinsing	See your Brulin representative for guidelines about the rinse process. Recommended conductivity of final rinse water:  • Ultra-Clean Applications: ≤ 50 microsiemens  • Precision Cleaning: ≤ 500 microsiemens  • Gross Cleaning: > 500 microsiemens

- o To avoid spotting, it is best if the parts remain wet between
- processing stages.
  o 815 QR contains a short-term flash rust inhibitor. If longer protection is desired, consult your Brulin representative for product recommendation.

#### **Typical Chemical Characteristics**

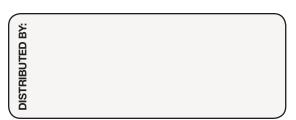
Physical Form	Liquid
Color	Blue
Odor/Fragrance	Citrus
Viscosity	Water-thin
Weight	8.90 lbs/gal (1.06g/ml)
pH of Concentrate	12.5
pH of Working Solution	11.6
Flash Point	None
Foaming Tendency	Moderate to high
Calculated V.O.C	8.4% (89.6 g/l)
Freeze/Thaw	Reusable after thawing & remixing

#### **Concentration Verification**

Brulin Titration Kit (Prod. No. XTRKIT)		
Sample Size:	5 mL	
Titrant:	1.0 N Acid (HCI) Solution	
Indicator:	Bromophenol Blue - 2 drops	
Concentration %:	Drops Titrant x 0.46	

Burette lest Method		
Sample Size:	50 mL	
Titrant:	0.5 N Acid Solution	
pH Endpoint:	4.50	
Concentration %:	mL Titrant x 0.56	
or		
Sample Size:	50 mL	
Titrant:	0.5N Acid Solution	
pH Endpoint:	3.80	
Concentration %:	mL Titrant x 0.55	

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#### **Packaging**

SHIPPING: Non-hazardous for shipping by ground, sea, or air in all package sizes

STORAGE: Store in well-ventilated areas at temperatures between 40-110°F (4-43°C). The recommended shelf life of this product is 24 months.

DISPOSAL: Biodegradable, Pretreat by skimming and/or filtering. Final sewerability is determined by the municipal sewer district covering the plant location.

#### AVAILABILITY:

- Bulk + up to 5,000 Gal (~19,000L)
- 5 Gal (18.9L) 55 Gal (208L) 275 Gal Tote (1,041L)

#### **Companion Products**

Formula 815 GD

The Cleaning Standard in Immersion & Ultrasonic Detergents

Brulin 63-G

Heavy-Duty Spray Wash Detergent