



# 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)

# 815 QR

## 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/PVC

### 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:<br>• Ultra-Clean Applications: ≤ 50 microsiemens<br>• Precision Cleaning: ≤ 500 microsiemens<br>• Gross Cleaning: > 500 microsiemens |
| o To avoid spotting, it is best if the parts remain wet between processing stages.<br>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 (HCl) Solution  |
| Indicator:                              | Bromophenol Blue - 2 drops |
| Concentration %:                        | Drops Titrant x 0.46       |

|                     |                     |
|---------------------|---------------------|
| Burette Test 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   |



### 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:

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

### Companion Products

#### Formula 815 GD

The Cleaning Standard in Immersion & Ultrasonic Detergents

#### Brulin 63-G

Heavy-Duty Spray Wash Detergent

DISTRIBUTED BY:

PRODUCT NUMBER  
**301004**



**800.776.7149**  
**WWW.BRULIN.COM**  
**ISO 9001:2008 CERTIFIED**

431-205C