

# Technical Data

## Everlube<sup>®</sup> R-75 PTFE, Solid Film Lubricant

**CURTISS -  
WRIGHT**

Everlube<sup>®</sup> Products

Surface Technologies Division

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### Product Description

Everlube R-75 is a thermally cured, PTFE based solid film lubricant with a polyamide-imide binder system. Everlube R-75 offers very good durability and abrasion resistance while also providing very good thermal stability. Everlube R-75 is ideal for lighter load-carrying applications. Everlube R-75 is purchased by a wide variety of markets, ranging from Automotive to Medical.

### Features / Benefits

- Excellent wear life
- Very good release properties
- NSF/ANSI/CAN 61 Section 5 Certified (black only)
- Very good thermal stability
- Ideal for lighter load carrying applications
- RoHS compliant

### Markets

- Semiconductor
- Medical
- Pump and Valve
- Elastomeric parts

### Typical Applications

- Wear plates, stampings, and tooling die
- Journal bearing races and sleeves
- Mold cavities and pins, fittings, couplings
- Elastomeric parts, Valves, meter components

### Physical Properties

|                                   |  |
|-----------------------------------|--|
| Lubricating Solids                | PTFE   |
| Binder                            | Organic  |
| Color and Appearance*             | Satin black finish, additional color options are available.                      |
| Carrier                           | Solvent based  |
| Solids (by weight)*               | 30% to 36%   |
| Density*                          | 9.0 ± 0.5 lb/gal (1080 ± 60 grams/liter)   |
| Flash Point                       | 40°F (4.4°C)   |
| Volatile Organic Compound         | 650 grams/liter (5.42 lb/gal)  |
| Theoretical Coverage <sup>1</sup> | 1085 ft <sup>2</sup> /gal @ 0.5 mils (26.6 m <sup>2</sup> /liter @ 12.7 microns) |
| Alternative or Repair Coatings    | A low VOC alternative coating for Everlube R75 is our Everlube 9601.             |

### Processing Information

|                              |  |
|------------------------------|--|
| Dry Film Thickness           | 0.5 to 3 mil (13 to 76 microns)  |
| Dilution / Cleanup Solvent   | n-methyl-2pyrrolidone (NMP), Everlube 900 solvent, or a 50/50 blend of NMP and Cyclohexanone |
| Dilution Ratio (for spray)   | Concentrate to 3:1 (product to solvent)  |
| Cure Cycle                   | 1 hr @ 400°F to 450°F (204°C to 232°C)   |
| Suggested Pretreatment       | Grit blast and/or phosphate  |
| Suggested Application Method | Spray  |

For additional information, please see Processing Bulletin #3000-A

(Continued)

**Typical Functional Properties**

|                             | <u>ASTM Test Method</u> | <u>Value</u>                        |
|-----------------------------|-------------------------|-------------------------------------|
| Corrosion Resistance        |                         |                                     |
| Test Panel                  | ASTM B117               | <200 hrs @ 5% neutral salt spray    |
| Test Panel Coating Method   |                         | 0.8 mil on grit blasted steel panel |
| Abrasion Resistance         | ASTM D4060              | Very good                           |
| Coefficient of Friction     | ASTM D2714              | 0.02 to 0.06                        |
| Operating Temperature Range |                         | -100° to 500°F (-73 to 260°C)       |
| Load Carrying Capacity      | ASTM 2714               | Up to 25,000 psi                    |
| Wear Life                   | ASTM 2714               | 300,000 cycles                      |

**Chemical Resistance (ASTM D-2510, Method C)**

|                                    |      |                         |      |
|------------------------------------|------|-------------------------|------|
| Isopropyl Alcohol or Ethyl Alcohol | Pass | Diethanolamine          | Pass |
| Mineral Spirits or Paint Thinner   | Pass | Hydrochloric Acid (10%) | Pass |
| Toluene                            | Pass | Sodium Hydroxide (10%)  | Pass |
| Acetone                            | Pass | Distilled Water         | Pass |
| Skydrol 500                        | Pass | Jet Fuels (JP-4)        | Pass |
| Hydraulic Fluids                   | Pass | Trichloroethylene       | Pass |
| Anti-Icing Fluids                  | Pass |                         |      |

Note: Chemical resistance may vary depending on the cure cycle. N/R = Not recommended

**Additional Information**Shelf Life and Storage:

One year from date of shipment, stored in a factory sealed container between the temperatures, 40°F to 100°F. Coatings are thermally stable, but we do not recommend prolonged exposure outside of the specified temperature range listed above.

Packaging:

Everlube R75 is available in gallons, 5-gallon pails, and quarts

Warranty:

No representation of warranty is expressed or implied and all warranties including warranties of marketability and fitness for use are expressly disclaimed. Nothing herein shall be construed as permission or recommendation to practice a patented invention without a license.

\* These tests are performed on each production lot

<sup>1</sup> Based on 100% transfer efficiency at a dry film thickness of 0.0005 inch (12.5 microns).

Issue Date: 8/19/02, Latest Revision Date: 2/11/20