Polyester Urethane Rubber

ASTM D1418 & ISO 1629 Designation: **AU, EU**

ASTM D2000, SAE J200 Type/Class: **BF, BG, BK**

Mil-R-3065 (Mil-Std 417) Class: **SB**

**Advantages:** The most abrasion resistant of all elastomers; good resistance to ozone, UV and radiation; good resistance to aliphatic hydrocarbons and fuels.

**Limitations:** Susceptible to hydrolysis in hot and damp conditions; poor resistance to polar organic solvents.

### Physical & Mechanical Properties
- **Durometer or Hardness Range:** 35-95 Shore A
- **Tensile Strength Range:** 500 - 6,000 PSI
- **Elongation (Range%):** 250% - 900%
- **Abrasion Resistance:** Fair to Good
- **Adhesion to Metal:** Excellent
- **Adhesion to Rigid Materials:** Excellent
- **Compression Set:** Good
- **Flex Cracking Resistance:** Fair to Good
- **Impact Resistance:** Good to Excellent
- **Resilience/Rebound:** Poor to Good
- **Tear Resistance:** Good to Excellent
- **Vibration Dampening:** Fair to Good

### Chemical Resistance
- **Acids, Dilute:** Fair to Good
- **Acids, Concentrated:** Poor
- **Acids, Organic (Dilute):** Fair
- **Acids, Organic (Concentrated):** Poor
- **Alcohols:** Good
- **Aldehydes:** Poor
- **Alkalies, Dilute:** Fair to Good
- **Alkalies, Concentrated:** Poor to Good
- **Amines:** Poor to Good
- **Animal & Vegetable Oils:** Fair to Excellent
- **Brake Fluids, Non-Petroleum Based:** Poor
- **Diester Oils:** Poor to Good
- **Esters, Alkyl Phosphate:** Poor
- **Esters, Aryl Phosphate:** Poor
- **Fuel, Aliphatic Hydrocarbon:** Good to Excellent
- **Fuel, Aromatic Hydrocarbon:** Poor to Fair
- **Fuel, Extended (Oxygenated):** Fair to Good
- **Halogenated Solvents:** Poor to Good
- **Hydrocarbon, Halogenated:** Fair to Good
- **Ketones (MEK, acetone):** Poor
- **Lacquer Solvents:** Poor
- **LP Gases & Fuel Oils:** Fair to Good
- **Oil Resistance:** Good
- **Petroleum Aromatic:** Good
- **Petroleum Non-Aromatic:** Good
- **Refrigerant Ammonia:** Poor
- **Refrigerant Halofluorocarbons:** R-12
- **Refrigerant Halofluorocarbons w/ Oil:** R-12
- **Silicone Oil:** Excellent
- **Solvent Resistance:** Poor

### Thermal Properties
- **General Temperature Range:** -65°F to 220°F
- **Min. for continuous Use (Static):** -65°F
- **Brittle Point:** -80°F
- **Max. for Continuous Use (Static):** 200°F

### Environmental Performance
- **Colorability:** Good to Excellent
- **Flame Resistance:** Poor to Good
- **Gas Permeability:** Good to Excellent
- **Odor:** Excellent
- **Ozone Resistance:** Excellent
- **Oxidation Resistance:** Good to Excellent
- **Radiation Resistance:** Good to Excellent
- **Steam Resistance:** Poor
- **Sunlight Resistance:** Good to Excellent
- **Weather Resistance:** Excellent
- **Water Resistance:** Poor to Good