

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

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

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

Esthers: Fair

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

Mineral Oils: Good to Excellent

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