**Epichlorohydrin Rubber (ECO)**

ASTM D1418 & ISO 1629 Designation: CO, ECO  
ASTM D2000, SAE J200 Type/Class: BG, BK, CE, CH, DH, DJ, DK  
Mil-R-3065 (Mil-Std 417) Class: SB

**Advantages:** Resistant to ozone, weathering and oils; good heat resistance; very low permeability to gasses; fire resistant and flame retardant.

**Limitations:** Electrically conductive; relatively expensive; low resilience; limited resistance to most organic chemicals can be corrosive.

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### Physical & Mechanical Properties

- **Durometer or Hardness Range:** 45-95 Shore A
- **Tensile Strength Range:** 1,000 - 3,000 PSI
- **Elongation (Range%):** 200% - 800%
- **Abrasion Resistance:** Fair to Good
- **Adhesion to Metal:** Good
- **Adhesion to Rigid Materials:** Good to Excellent
- **Compression Set:** Good to Excellent
- **Flex Cracking Resistance:** Good to Excellent
- **Impact Resistance:** Fair to Good
- **Resilience/Rebound:** Good to Very Good
- **Tear Resistance:** Fair to Excellent
- **Vibration Damping:** Good

### Chemical Resistance

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

### Thermal Properties

- **General Temperature Range:** -65°F to 275°F
- **Min. for continuous Use (Static):** -60°F
- **Brittle Point:** -70°F
- **Max. for Continuous Use (Static):** 275°F

### Environmental Performance

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