



Rubber Material Selection Guide CR or Neoprene® Polychloroprene

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|--------------------------------|-----------------|
| ■ Abbreviation | CR |
| ■ ASTM D-2000 Classification | BC, BE |
| ■ Chemical Definition | Polychloroprene |
| ■ RRP Compound Number Category | 20000 Series |

Physical & Mechanical Properties

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|-------------------------------|------------------------|
| ■ Durometer or Hardness Range | 20 – 95 Shore A |
| ■ Tensile Strength Range | 500 – 3,000 PSI |
| ■ Elongation (Range %) | 100 % – 800 % |
| ■ Abrasion Resistance | Very Good to Excellent |
| ■ Adhesion to Metal | Excellent |
| ■ Adhesion to Rigid Materials | Good to Excellent |
| ■ Compression Set | Poor to Good |
| ■ Flex Cracking Resistance | Good |
| ■ Impact Resistance | Good to Excellent |
| ■ Resilience / Rebound | Fair to Good |
| ■ Tear Resistance | Good to Excellent |
| ■ Vibration Dampening | Good to Excellent |

Chemical Resistance

- | | |
|---------------------------------|-------------------|
| ■ Acids, Dilute | Excellent |
| ■ Acids, Concentrated | Poor |
| ■ Acids, Organic (Dilute) | Good to Excellent |
| ■ Acids, Organic (Concentrated) | Poor to Good |
| ■ Acids, Inorganic | Good to Excellent |



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Chemical Resistance

■ Alcohol's	Excellent
■ Aldehydes	Poor to Fair
■ Alkalies, Dilute	Good
■ Alkalies, Concentrated	Poor
■ Amines	Poor to Good
■ Animal & Vegetable Oils	Good
■ Brake Fluids, Non-Petroleum Based	Fair
■ Diester Oils	Poor
■ Esters, Alkyl Phosphate	Poor
■ Esters, Aryl Phosphate	Poor to Fair
■ Ethers	Poor
■ Fuel, Aliphatic Hydrocarbon	Poor to Good
■ Fuel, Aromatic Hydrocarbon	Poor to Fair
■ Fuel, Extended (Oxygenated)	Fair
■ Halogenated Solvents	Poor
■ Hydrocarbon, Halogenated	Poor
■ Ketones	Poor to Fair
■ Lacquer Solvents	Poor
■ LP Gases & Fuel Oils	Good
■ Mineral Oils	Fair to Good
■ Oil Resistance	Fair
■ Petroleum Aromatic	Good
■ Petroleum Non-Aromatic	Good
■ Refrigerant Ammonia	Excellent
■ Refrigerant Halofluorocarbons	R-11, R-12, R-13, R-21, R-22
■ Refrigerant Halofluorocarbons w/ Oil	R-11, R-12, R-22
■ Silicone Oil	Fair to Excellent
■ Solvent Resistance	Fair



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Thermal Properties

- | | |
|---------------------------------------|--------------------|
| ■ Low Temperature Range | - 70° F to - 30° F |
| ■ Minimum for Continuous Use (Static) | - 80° F |
| ■ Brittle Point | - 85° F |
| ■ High Temperature Range | + 200° F to + 250° |
| ■ Maximum for Continuous Use (Static) | + 250° F |

Environmental Performance

- | | |
|------------------------|-------------------|
| ■ Colorability | Fair |
| ■ Flame Resistance | Fair to Good |
| ■ Gas Permeability | Fair to Good |
| ■ Odor | Fair to Good |
| ■ Ozone Resistance | Good to Excellent |
| ■ Oxidation Resistance | Good to Excellent |
| ■ Radiation Resistance | Fair to Good |
| ■ Steam Resistance | Fair to Good |
| ■ Sunlight Resistance | Good to Excellent |
| ■ Taste Retention | Fair to Good |
| ■ Weather Resistance | Fair to Good |
| ■ Water Resistance | Fair to Good |

For assistance in identifying the appropriate polymer or material, or to develop and formulate a polyacrylate / acrylic rubber compound to meet your specific application and performance requirements, please contact Robinson Rubber Products at e-mail: sales@robinsonrubber.com or phone: +1-763-535-6737.

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