

Rubber Material Selection Guide **CM or Chloropolyethylene**

▪ Abbreviation	CM
▪ ASTM D-2000 Classification	CE, CH
▪ Chemical Definition	Chloropolyethylene
▪ RRP Compound Number Category	19-0000 Series
◆ <u>Physical & Mechanical Properties</u>	
▪ Durometer or Hardness Range	40 – 90 Shore A
▪ Tensile Strength Range	500 – 2,500 PSI
▪ Elongation (Range %)	100 % – 700 %
▪ Abrasion Resistance	Good to Excellent
▪ Adhesion to Metal	Fair to Good
▪ Adhesion to Rigid Materials	Fair to Good
▪ Compression Set	Good to Excellent
▪ Flex Cracking Resistance	Fair to Good
▪ Impact Resistance	Good
▪ Resilience / Rebound	Fair to Good
▪ Tear Resistance	Poor to Good
▪ Vibration Dampening	Good
◆ <u>Chemical Resistance</u>	
▪ Acids, Dilute	Excellent
▪ Acids, Concentrated	Good to Excellent
▪ Acids, Organic (Dilute)	Poor to Good
▪ Acids, Organic (Concentrated)	Poor to Good
▪ Acids, Inorganic	Good
▪ Alcohol's	Excellent

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◆ Chemical Resistance

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

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◆ Thermal Properties

▪ Low Temperature Range	- 60° F to - 20° F
▪ Minimum for Continuous Use (Static)	- 60° F
▪ Brittle Point	- 70° F
▪ High Temperature Range	+ 250° to + 300° F
▪ Maximum for Continuous Use (Static)	+ 300° F

◆ Environmental Performance

▪ Colorability	Excellent
▪ Flame Resistance	Good
▪ Gas Permeability	Good to Excellent
▪ Odor	Fair to Good
▪ Ozone Resistance	Excellent
▪ Oxidation Resistance	Excellent
▪ Radiation Resistance	Good to Excellent
▪ Steam Resistance	Poor
▪ Sunlight Resistance	Excellent
▪ Taste Retention	Fair to Good
▪ Weather Resistance	Excellent
▪ Water Resistance	Good to Excellent

For assistance in identifying the appropriate polymer or material, or to develop and formulate a CM / chloropolyethylene 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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