Rubber Material Selection Guide
CSM or Hypalon®
Chlorosulphonated Polyethylene

■ Abbreviation	CSM
■ ASTM D-2000 Classification	CE
■ Chemical Definition	Chlorosulphonated-polyethylene
■ RRP Compound Number Category	70000 Series

Physical & Mechanical Properties

■ Durometer or Hardness Range	45 – 95 Shore A
■ Tensile Strength Range	1,000 – 3,000 PSI
■ Elongation (Range %)	100 % – 800 %
■ Abrasion Resistance	Good to Excellent
■ Adhesion to Metal	Excellent
■ Adhesion to Rigid Materials	Excellent
■ Compression Set	Poor to Good
■ Flex Cracking Resistance	Fair to Good
■ Impact Resistance	Good to Very Good
■ Resilience / Rebound	Fair to Good
■ Tear Resistance	Fair to Good
■ Vibration Dampening	Fair to Good

Chemical Resistance

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

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Chemical Resistance

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

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Thermal Properties

■ Low Temperature Range	- 60º F to - 40º F
■ Minimum for Continuous Use (Static)	- 65º F
■ Brittle Point	- 70º F
■ High Temperature Range	+ 225º F to + 275º F
■ Maximum for Continuous Use (Static)	+ 275º F

Environmental Performance

■ Colorability	Excellent
■ Flame Resistance	Good to Excellent
■ 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
■ Taste Retention	Fair to Good
■ Weather Resistance	Excellent
■ Water Resistance	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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