Rubber Selection Guide
CSM or Hypalon®
Chlorosulphonated Polyethylene

- Abbreviation: CSM
- ASTM D-2000 Classification: CE
- Chemical Definition: Chlorosulfonated-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 CSM or Hypalon / chlorosulphonated-polyethylene 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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