



PRESS-SEAL GASKET CORPORATION

Providing products and services that protect our planet's clean water supply

January 3, 2012

MATERIAL SPECIFICATION NEOPRENE (Chloroprene) (CR) RUBBER

Requirements for Rubber Gaskets:

Rubber gaskets shall be Neoprene conforming to the material and performance requirements of ASTM C 361 for Oil Resistant Gaskets, ASTM C 1619 Class B, ASTM C 443 for Oil Resistant Gaskets, and CSA A257.3-03 for Oil-Resistant Rubber Gaskets. The compound shall contain not less than 50% Neoprene polymer by volume.

Tests and preparation of the Neoprene material shall be in accordance with the appropriate ASTM Test Methods and shall meet the following requirements:

Tensile strength (min)	1500 psi	ASTM D 412
Elongation at break (min)	350%	ASTM D 412
Hardness (Shore Durometer A)	45 +/-5	ASTM D 2240
Compression set (max)	20%	ATSM D 395 Method B

Accelerated Aging:

Air oven aging 70 hours @ 212° F (100° C)

Test specimen shall be prepared in accordance with ASTM D 573.

Tensile change (max)	-20%
Elongation change (max)	-40%
Hardness change (max)	+15%

Oil Resistance Test:

Test specimen 70 hours @ 212° F (100° C) in ASTM D 471 No. 3 Oil

Tensile change (max)	-60%
Elongation change (max)	-30%
Volume change (max)	+80%

Ozone resistance	no cracks	ASTM D 1149
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Thermal Properties:

Continuous Temperature Resistance (max)	225° F (107° C)
Intermittent Temperature Resistance (max)	300° F (150° C)
Steam Resistance (300° F/150° C)	Poor

Neoprene compounds are generally resistant to moderate Chemicals and Acids, Ozone, Oils, Fats, and Greases. They are attacked by strong Oxidizing Agents, Esters, Ketones, Chlorinated-, Aromatic-, and Nitro-Hydrocarbons.

Michael R. Miller
Quality Manager