



## RUBBER COMPOUNDS

This PDF lists the main types of rubber compound we stock. For further details on any of these compounds, please contact our sales department.

<b>Silicone Rubber</b>	.	.	.	.	.	.	.	.	.	<b>2</b>
<b>SBR (Red Rubber)</b>	.	.	.	.	.	.	.	.	.	<b>2</b>
<b>EPDM</b>	.	.	.	.	.	.	.	.	.	<b>2</b>
<b>Nitrile Rubber (Black)</b>	.	.	.	.	.	.	.	.	.	<b>3</b>
<b>Nitrile Rubber (White)</b>	.	.	.	.	.	.	.	.	.	<b>3</b>
<b>Butyl Rubber</b>	.	.	.	.	.	.	.	.	.	<b>3</b>
<b>Neoprene</b>	.	.	.	.	.	.	.	.	.	<b>4</b>
<b>Durashield®</b>	.	.	.	.	.	.	.	.	.	<b>4</b>
<b>Viton</b>	.	.	.	.	.	.	.	.	.	<b>4</b>
<b>CSM (Chlorosulphonated Polyethylene)</b>	.	.	.	.	.	.	.	.	.	<b>5</b>
<b>Recycled Rubber</b>	.	.	.	.	.	.	.	.	.	<b>5</b>
<b>C.I. Packing</b>	.	.	.	.	.	.	.	.	.	<b>5</b>



**SILICONE RUBBER**

Silicone rubber offers excellent resistance to the aging process. It is also unaffected by sunlight or ozone. Silicone rubber offers little mechanical resistance, and it does not resist aliphatic and aromatic hydrocarbons or steam. It is often used in applications involving hot air.

Service Limits		
Type	Description	Value
Temperature	Minimum	-100°F
	Maximum	450°F
Thickness		1/16 to 1/2"
Hardness	Durometer	30-80
Elongation		700%
Tensile Range		200-1500 psi

**SBR (RED RUBBER)**

Styrene-butadiene rubber (SBR) is a synthetic rubber developed as an alternative to natural rubber. It is recommended for service in applications involving hot and cold water, air, steam, and some weak acids. SBR should not be used in applications involving strong acids, grease and chlorates. SBR offers little resistance to ozone and the majority of hydrocarbons.

Service Limits		
Type	Description	Value
Temperature	Minimum	-20°F
	Maximum	180°F
Thickness		1/16 to 2"
Hardness	Durometer	40-80
Elongation		600%
Tensile Range		500-3000 psi

**EPDM**

Ethylene-Propylene (EPDM) rubber has good resistance to ozone, steam, strong acids and alkali. It is not recommended for use with solvents and aromatic compounds.

Service Limits		
Type	Description	Value
Temperature	Minimum	-40°F
	Maximum	250°F
Thickness		.012 to 1/2"
Hardness	Durometer	40-70
Elongation		600%
Tensile Range		500-2500 psi

Materials should never be recommended when both temperature and pressure are at the maximum listed. Properties and applications in this PDF are typical. No application should be undertaken by anyone without independent study and evaluation for suitability. Never use more than one gasket in one flange joint and never reuse a gasket. Improper use or gasket selection could cause property damage and/or serious personal injury. While the utmost care has gone into re-publishing the information contained herein, CRGI assumes no responsibility for errors. Specifications and information contained in this PDF are subject to change without notice.



### NITRILE RUBBER (BLACK)

Nitrile rubber (NBR) is also known as Buna-N. It offers good resistance to oils, and aliphatic hydrocarbons and gasoline. NBR offers little resistance to strong oxidant agents, chlorate hydrocarbons, ketones and esters

Service Limits		
Type	Description	Value
Temperature	Minimum	-30°F
	Maximum	190°F
Thickness		1/16 to 1/2"
Hardness	Durometer	60-70
Elongation		600%
Tensile Range		200-3000 psi

### NITRILE RUBBER (WHITE)

White nitrile is a superior compound designed specifically for general gasketing, countertops and skirting in all areas of food and biotechnology processing. White nitrile sheet has good resistance to oily and greasy food products. This white colored sheet is non-marking. The ingredients of White nitrile are food grade.

Service Limits		
Type	Description	Value
Temperature	Minimum	-40°F
	Maximum	190°F
Thickness		1/16 to 1/2"
Hardness	Durometer	50-90
Elongation		600%
Tensile Range		200-3000 psi

### BUTYL RUBBER

Butyl rubber (IIR) is a blend of polymers mixed with isoprene. Butyl rubber is a very good general purpose rubber for many applications. Butyl rubber is known for its excellent impermeability to gases. This characteristic, together with its flexibility and weather resistance, makes it a habitually-used rubber for numerous industrial applications. Butyl rubber is also essential for seals and protection in chemical industries where high concentrations of mineral acids and alkalis occur such as phosphate plants, fertilisers, caustic soda, etc.

Service Limits		
Type	Description	Value
Temperature	Minimum	-30°F
	Maximum	215°F
Thickness		1/16 to 1/4"
Hardness	Durometer	30-80
Elongation		850%
Tensile Range		500-3000 psi

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### NEOPRENE

Neoprene, or polychloroprene, is a synthetic rubber that has physical properties closely resembling those of natural rubber. Has better weathering resistance than Natural Rubber and moderate resistance to oil, heat and ozone fluids.

Service Limits		
Type	Description	Value
Temperature	Minimum	-20°F
	Maximum	190°F
Thickness		1/32 to 2"
Hardness	Durometer	30-80
Elongation		600%
Tensile Range		500-3000 psi

### DURASHIELD®

Durashield®, or wear-resistant rubber, offers the ideal blend of high tear and abrasion performance combined with excellent durability and noise reduction.

Service Limits		
Type	Description	Value
Temperature	Minimum	-20°F
	Maximum	180°F
Thickness		1/16 to 1/2"
Hardness	Durometer	40-60
Elongation		500-690%
Tensile Range		3300-3820 psi

### VITON®

Viton (fluoro-elastomer), has heat resistance up to 600°F and resistance to a wide range of oils and solvents; especially all aliphatic, aromatic, and halogenated hydrocarbons, acids, animal and vegetable oils.

Service Limits		
Type	Description	Value
Temperature	Minimum	-10°F
	Maximum	450°F
Thickness		1/64 to 1/4"
Hardness	Durometer	60-70
Elongation		300%
Tensile Range		500-2000 psi



**CSM (CHLOROSULPHONATED POLYETHYLENE)**

CSM (Chlorosulphonated Polyethylene) has superior resistance to weather, ozone and oxidation; excellent resistance to alkalis and acids.

Service Limits		
Type	Description	Value
Temperature	Minimum	-22°F
	Maximum	248°F
Thickness		1/16 to 1/4"
Hardness	Durometer	60
Elongation		300%
Tensile Range		1100 psi

**RECYCLED RUBBER**

Recycled rubber is made by recovering and recycling used rubber goods, primarily tires. There are many reasons why rubber should be reclaimed or recovered, including the following:

- Recovered rubber can cost half that of natural or synthetic rubber.
- Recovered rubber has some properties that are better than those of virgin rubber.
- Producing rubber from reclaim requires less energy in the total production process than does virgin material.
- It is an excellent way to dispose of unwanted rubber products, which is often difficult.
- It conserves non-renewable petroleum products, which are used to produce synthetic rubbers.

CRGI stocks materials made from recycled rubber. By fashioning new products from recycled rubber, CRGI is able to reduce the environmental impact of unclaimed rubber.

**C.I. PACKING**

C.I. Packing is a fabric reinforced sheet for use in applications where the stresses are generally static in nature.

Service Limits		
Type	Description	Value
Temperature	Minimum	-22°F
	Maximum	180°F
Thickness		1/16 to 1/4" (1- or 2-ply)
Hardness	Durometer	60-80
Elongation		200-450%
Tensile Range		500-750 psi

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