

Design Engineers' General Guide To Rubber Compounds.

	Butyl	EPDM	Hypalon	Natural Rubber	Neoprene (chloroprene)	Nitrile (BUNA-N)	Silicone	Styrene Butadiene (SBR)	Urethane	Fluoro-Elastomer (Viton)
ASTIM D-2000 Classification	AA	BA	CE	AA	BC	BF	GE	AA	BG	HK
Durometer	40-75	30-100	55-95	30-90	30-90	40-95	45-85	40-90	20-100	70-90
Elongation	Fair	Good	Fair	Excel.	Excel.	Good	Fair	Good	Excel.	Good
Heat Aging	Excel.	Excel.	Good	Good	V.Good	Excel.	Excel.	Good	Excel.	Excel.
Sunlight Aging	Good	Excel.	Excel.	Poor	Good	Good	Excel.	Poor	Excel.	Excel.
Lubricating Oil Resistance	Poor	Poor	Good	Poor	Good	Excel.	Fair	Poor	Good	Good
Aromatic Oil Resistance	Poor	Poor	Poor	Poor	Fair	Good	Poor	Poor	Good	Good
Animal-Vegetable Oils Resistance	Excel.	Poor	Good	Fair	Excel.	Good	Good	Fair	Fair	Good
Flame Resistance	Poor	Poor	Excel.	Poor	Good	Poor	Fair	Poor	Poor	Good
Tear Resistance	Good	Good	Excel.	Good	Good	Fair	Poor	Fair	Excel.	Fair
Abrasion Resistance	Good	Good	Excel.	Excel.	Excel.	Good	Poor	Good	Excel.	Fair
Compression Set Resistance	Fair	Fair	Good	Good	Fair	Good	Fair	Fair	Excel.	Good
Dielectric Strength	Good	Good	Good	Excel.	Fair	Poor	Good	Excel	Fair	Good
Freedom from Odor	Good	Fair	Excel.	Excel.	Good	Fair	Fair	Fair	Good	Fair
Maximum Temperature (F°)	250	350	250	210	260	260	550	215	250	500
Minimum Temperature (F°)	-50	-50	-35	-45	-50	-40	-150	-50	-40	-40

NEOPRENE

- All purpose outdoor-indoor synthetic rubber resistant to most chemicals, oils, weathers, etc.

EPDM

- Outdoor weather resistant even under extremely severe conditions - resistant to color fade-heat-electricity.

NITRILE (Buna-N)

- Especially resistant to aromatic hydrocarbons, gasoline, petroleum oils, mineral and vegetable oils.

SBR (Buna-S)

- Non oil resistant, economically priced synthetic rubber - especially noted for it's low water absorption properties.

NATURAL RUBBER

- Extremely resilient with high tensile & elongation properties - also resistant to flexing, permanent set & electricity - also used as seals in food and beverage applications.

URETHANE

- Outstanding tensile and abrasion qualities - excellent resistance to wear, ozone, oxygen, kerosene & gasoline.

SILICONES

- Can withstand extreme heat or cold and retain flexibility - normal temp. range of -150°F to 550°F.

VITON

- In addition to it's ability to withstand extreme temperatures, it is also fuel and oil resistant.