

# Material Comparison

Name		Natural Rubber	SBR	Epichlorhydrin	Nitrile	Chloroprene	Silicone	EPDM	Fluorocarbon
		Styrene Butadiene	Epichlorohydrin	Butadiene Acrylonitrile	Neoprene®	Ethylene-Propylene	VITON®		
Resistance to traction (pound/sq.inch)	Pure Rubber	Over 3000	Under 1000	Under 1000	Under 1000	Over 3000	Under 1500	Under 1000	1200
	With Black Charge	Over 3000	Over 2000	2500	Over 2000	Over 3000	Over 1500	Over 2000	1500 - 3000
Hardness limits (Sh A)		30 to 90	40 to 90	40 to 90	40 to 95	40 to 95	40 to 85	30 to 90	50 to 90
Specific weight (Base Material)		0.93	0.94	1.36 to 1.27	1.00	1.23	1.14 to 2.05	0.86	1.8
Adherence to Metals		Excellent	Excellent	Regular to Good	Excellent	Excellent	Excellent	Regular	Regular to Good
Adherence to Fabrics		Excellent	Good	Regular to Good	Good	Excellent	Excellent	Good	Good
Resistance to Tearing		Very Good	Regular	Regular to Good	Regular	Good	Poor	Regular	Regular to Good
Resistance to Scorching		Excellent	Good to Excellent	Regular to Good	Good	Excellent	Poor	Good to Excellent	Good
Deforming by Compression		Good	Good	Poor	Good	Regular to Good	Regular	Good	Excellent
Rebound	Cold	Excellent	Good	Good	Good	Good	Excellent	Excellent	Regular
	Hot	Excellent	Good	Good	Good	Very Good	Excellent	Excellent	Good
Dielectric Resistance		Excellent	Excellent	Good	Poor	Very Good	Good	Prominent	Very Good
Electrical isolation		Good to Excellent	Good to Excellent	Good	Poor	Regular to Good	Excellent	Prominent	Good
Gas Permeability		Quite Low	Quite Low	Low to Very Low	Low	Low	Quite Low	Quite Low	Very Low
Resistance to Acids	Diluted	Regular to Good	Regular to Good	Regular to Good	Good	Excellent	Excellent	Excellent	Good to Excellent
	Concentrated	Regular to Good	Regular to Good	Regular	Good	Good	Regular	Good	Excellent
Resistance to Solvents	Alifatic Hydrocarbons	Poor	Poor	Excellent	Excellent	Regular to Good	Poor	Poor	Excellent
	Aromatic Hydrocarbons	Poor	Poor	Good	Good	Regular	Poor	Poor	Excellent
	Oxygenated Solvents (ketones)	Good	Good	Poor	Poor	Poor to Regular	Regular	Excellent	Poor
	Paint Solvents	Poor	Poor	Regular	Regular	Poor	Poor	Poor to Regular	Poor to Regular
Resistance to:	Swelling in Lubricant Oil	Poor	Poor	Excellent	Very Good	Good	Regular	Poor	Excellent
	Oil and Gasoline	Poor	Poor	Excellent	Excellent	Good	Regular	Poor	Excellent
	Vegetable and animal oils	Poor to Good	Poor to Good	Excellent	Very Good	Good	Good to Excellent	Good to Excellent	Excellent
	Hygroscopicity	Very Good	Good to Very Good	Good	Good	Good	Excellent	Excellent	Very Good
	Oxidation	Good	Regular	Good	Good	Very Good	Excellent	Excellent	Prominent
	Ozone	Poor	Poor	Excellent	Regular	Very Good	Excellent	Prominent	Prominent
	Sunlight Aging	Poor	Poor	Prominent	Poor	Very Good	Excellent	Prominent	Prominent
	Heat Aging	Regular	Regular to Good	Very Good	Good	Good	Prominent	Excellent	Prominent
	Low Temperatures	Very Good	Very Good	Good to Very Good	Regular to Good	Good	Prominent	Excellent	Regular to Good
	Flames	Poor	Poor	Poor to Regular	Poor	Good	Regular to Good	Poor to Good	Excellent