



Chemical compatability and physical properties table

The information below is a quick guide to our material properties. Please contact our sales team for expert advice

Material	Nitrile (NBR)	Neoprene	EPDM	Silicone	Viton	Polyurethane	HNBR	Fluorosilicone
Abbreviation	NBR	CR	EPDM	MVQ	FPM	AU	HNBR	FVMQ
Tensile Strength (PSI)	2000	3000	3000	1500	2000	4000	3000	1500
Tensile Strength (kPa)	14k	20k	20k	10k	14k	27k	20k	10k
Hardness (IRHD)	40-95	40-95	40-90	30-85	55-95	35-99	50-95	40-80
Specific Gravity (base material)	1	1.23	0.86	1.1/1.6	1.85	1.06	0.98	1.3-1.8
Tear Resistance	Fair	Good	Fair to Good	Poor	Fair	Excellent	Good	Fair
Abrasion Resistance	Excellent	Good	Good	Poor	Good	Outstanding	Excellent	Good
Compression Set	Good	Fair to Good	Good	Fair	Fair to Good	Fair	Good	Fair
Rebound – Cold	Good	Very Good	Very Good	Excellent	Fair to Good	Good	Good	Excellent
Rebound – Hot	Good	Very Good	Very Good	Excellent	Good	Good	Very Good	Good
Dielectric Strength	Poor	Good	Excellent	Good	Good	Excellent	Fair	Good
Electrical Insulation	Poor	Fair to Good	Excellent	Excellent	Fair to Good	Fair to Good	Fair	Excellent
Gas Permeability	Low	Low	Fairly Low	Fairly Low	Very Low	Fairly Low	Fairly Low	Fairly Low
Adhesive Properties	Good	Good	Poor	Fair	Good	Fair	Good	Fair
Acid Resistance – Dilute	Good	Excellent	Excellent	Excellent	Excellent	Fair	unknown	unknown
Acid Resistance	Good	Good	Excellent	Fair	Excellent	Poor	unknown	unknown
Alkali Resistance	Fair	Fair	Good	Fair	Fair	Poor	unknown	unknown
Solvent Resistance - Aliphatic Hydrocarbons	Excellent	Fair to Good	Poor	Poor	Excellent	Excellent	Good	Fair
Aromatic Hydrocarbons	Good	Fair	Poor	Poor	Excellent	Fair to Good	Good	Fair
Ketones	Poor	Poor	Very Good	Fair	Poor	Poor	Poor	Poor
Laquer Solvents	Fair to Good	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Resistance To - Swell in Lube Oil	Very Good	Good	Poor	Fair	Excellent	Excellent	Very Good	Good
Hydraulic Fluid – Silicates	Good	Good	Fair	Poor	Good	Good	unknown	unknown
Hydraulic Fluid – Phosphates	Poor	Poor	Good	Good	Poor	Good	unknown	unknown
Oil & Gasoline	Excellent	Good	Poor	Fair	Excellent	Excellent	Very Good	Good
Unleaded Fuel	Good	Fair	Poor	Fair	Good	Good	unknown	unknown
Animal & Vegetable Fats	Very Good	Good	Good	Excellent	Excellent	Excellent	Very Good	Good
Water Absorbtion	Good	Good	Excellent	Excellent	Very Good	Good	Very Good	Good
Oxidation	Good	Excellent	Excellent	Excellent	Outstanding	Excellent	Good	Excellent
Ozone	Fair	Excellent	Outstanding	Excellent	Outstanding	Excellent	Good	Excellent
Sunlight Ageing	Poor	Very Good	Outstanding	Excellent	Outstanding	Good	Very Good	Very Good
Heat Ageing (continuous service limits °C)	-5.75	-4.75	-3.625	-3.05	10.25	-2.125	+150/-25	+200/-100
Heat	Good	Very Good	Excellent	Outstanding	Outstanding	Good	Excellent	Good
Cold	Fair to Good	Good	Excellent	Outstanding	Good	Excellent	Excellent	Excellent
British Standards Available	BS:2751 BS:3222	BS:2752	BS:6014					
ASTM D2000	BG	BC	DA	GE/FE	HK	BG	BF	FK