

POLYMER COMPARISON CHART

Properties	Natural NR	Nitrile NBR	Neoprene CR	Hypalon CSP	Butyl IIR	EPDM	Silicone MVQ	FPM	AU. EU.
Hardness Range (Durometer A)	30-90	20-95	30-95	40-95	35-85	40-90	25-85	55-95	60-90
Tensile Strength (PSI)	3000	3500	3000	2500	2000	3000	1100	1800	4000
Specific Gravity (Base Material)	0.93	1.00	1.23	1.12-1.20	0.92	0.86	0.98	1.85	1.06
Vulcanizing Properties	E	E	E	E	F	E	E	G	E
Adhesion to Metals	E	E	E	E	F	E	F	G	E
Adhesion to Fabrics	E	E	E	G	F	G	F	E	E
Tear Resistance	G	F	G	F	G	G	P	F	E
Abrasion Resistance	E	E	E	E	G	E	P	G	O
Compression Set	G	G	G	F	F	G	G	G	F
Electrical Insulation	G	P	G	G	E	E	E	G	G
Permeability to Gases	F	F	P	P	P	F	G	P	F
Acid Resistance - Dilute	G	G	E	E	E	E	G	E	F
Acid Resistance - Conc.	G	G	G	G	G	E	P	E	P
Solvent Resistance									
Aliphatic Hydrocarbons	P	E	G	G	P	P	F	E	E
Aromatic Hydrocarbons	P	G	G	F	P	P	F	E	F
Oxygenated (Ketones etc)	G	P	F	P	F	G	F	P	P
Lacquer Solvents	P	F	P	P	F	P	P	P	
Resistance to Swelling in									
Lubricating Oil	P	G	G	E	P	P	F	E	E
Oil & Gasoline	P	G	G	G	P	P	F	E	E
Animal & Vegetable Oil	P	G	G	G	G	G	F	E	E
Water Absorption	G	E	G	G	E	G	E	G	GP100°C
Oxidation	G	F	E	E	F	E	E	O	E
Ozone	F	P	E	O	F	O	E	O	E
Sunlight Ageing	P	P	G	O	F	O	G	O	G
Heat Ageing									
Cont. Service	85°C	100°C	125°C	135°C	110°C	150°C	210°C	255°C	75°C
Flame	P	P	G	G	P	P	F	E	F
Heat	G	G	G	E	G	E	E	O	G
Cold	E	F	F	G	G	E	E	G	E