

Physical/Chemical Properties of Natural and Synthetic Rubbers

Properties	N.R	SBR	EPDM	NBR	CR	HYPLON CSM	SILICONE VMQ	VITON FKM	HNBR	FLOURO SILICONE FVMQ
Physical Strength	E	G	G	G	G	G	F	G	G	F
Compression Set	G	G	G	G	F to G	G	G	G	G	V.G
Tear & Abration	E	G	G	G	G	G	P	V.G	V.G	P
Resilience	E	G	V.G	G	V.G	P	G	F	F	G
Gas Permeability	P	P	P	P	P	P	P	P	G	F
Electrical Strength	E	E	G	P	G	F	E	G	P	G
Flame Resistance	P	P	P	P	E	P	G	E	P	V.G
Water Resistance	V.G	G	E	F	G	G	G	G	V.G	V.G
Oxidation	F	F	E	G	V.G	E	E	E	E	E
Ozone Weathering	P	P	E	F	V.G	E	V.G	F	E	E
OIL RESISTANCE										
ASTM Oil No 1 @ 20°C	P	P	F	G	E	G	E	E	E	G
ASTM Oil NO 1 @ 100°C	P	P	P	G	G	G	G	E	E	G
ASTM Oil No 3 @ 20°C	P	P	P	G	G	G	G	E	F	G
ASTM Oil No 3 @ 100°C	P	P	P	G	F	G	F	E	F	G
ASTM Fuel B 40°C	P	P	P	F	P	F	P	E	--	G
TEMPERATURE										
Max Ext Temp°C	90°C	105°C	150°C	130°C	125°C	160°C	300°C	250°C	180°C	280°C
Max Cont Temp°C	75°C	85°C	130°C	100°C	95°C	130°C	205°C	205°C	150°C	200°C
Lowest Temp °C	- 60°C	- 55°C	- 50°C	- 20°C	- 35°C	- 25°C	- 60°C to - 80°C	- 20°C	- 28°C	- 60°C

E = Excellent V.G = Very Good G = Good F = Fair P= Poor