

Material Selection Guide

E-Excellent **F-Fair**
G-Good **P-Poor**

H-High **L-Low**
M-Medium

Base Elastomer	Natural Rubber (Polyisoprene)	GRS/SBR (Styrene Butadiene)	EPDM (Ethylene Propylene)	Neoprene (Chloroprene)	Nitrile (Butadiene Acrylonitrile)	Fluorocarbon	Silicone (Polysiloxane)
Compound Number (Standard Durometer) Black	05	01	03	04	02	14	08
Standard Durometer	50	60	60	60	50	60	50
Custom Durometer	40,60,70,80	40,50,70,80	40,50,70,80	40,50,70,80	40,60,70,80	40,50,70,80	40,60,70,80
SAE J200-ASTM D-2000 Classification	AA	AA BA	AA CA BA DA	BC BE	BF BK BG	HK	FC FE GE
Maximum Tensile Strength-PSI	3500	2500	2500	3000	3000	2000	1000
Resilience	H	M	M	H	L	L	M
Impact Strength	E	E	G	E	G	G	F
Abrasion Resistance	E	E	G	E	E	G	P
Tear Resistance	E	F	F	G	G	G	F
Maximum Service Temp. Deg. F	180	180	300	225	250	500	550
Minimum Service Temp. Deg. F	-60	-60	-70	-40	-60	-25	-178
Oil Resistance	P	P	P	E	E	E	G
Fuel Resistance	P	P	F	G	E	E	P
Weather Aging	F	F	E	G	G	E	E
Oxidation	F	F	E	E	F-G	E	E
Heat Aging	G	G	E	E	G	E	E
Water Swell Resistance	F	E	E	G	E	E	E
Flame Resistance	P	P	P	E	P	E	E
Adhesion To Metal	E	E	G	E	G	G	E
Electrical Resistivity	E	E	E	F	F-G	G	E
Typical Applications	Tires and tubes, gaskets, belts, hoses, seals, shock mounts	Same as Natural Rubber	Auto parts, electrical insulation, dust covers, weather stripping & conveyor belts	Petroleum and chemical tank linings, automotive gaskets & seals, molded parts, footwear & weather stripping	Gasoline and oil resistant hoses, gaskets & seals, rollers, o-rings, shock & vibration mounts	O-rings, shaft seals, valve parts, packings, diaphragms, gaskets & pump parts	Parts subjected to extremely high or low temperatures, seals gaskets, o-rings & bellows