

# Elastomer Guide 1

Common Name Base Polymer	Chemical Name	Material Designation (ASTM D-2000, SAE J 200 Classification)	ASTM D7-35, SAE J-14 & MIL-R-3065 (MIL-Std-417)	ASTM D-1418 Designation	Tensile Strength  (PSI) Pure Gum	Black Loaded Stocks	Hardness Range (Durometer A)	Specific Gravity (Base Material)	Adhesion to Metals	Adhesion to Fabrics	Tear Resistance	Abrasion Resistance
Natural Rubber	<b>Polyisoprene</b>	AA	R(N)	NR	Over 3000	Over 3000	30-90	0.93	E	E	VG	E
SBR or GR-S or Buna S	<b>Styrene Butadiene</b>	AA	R(S)	SBR	Below 1000	Over 2000	40-90	0.94	E	G	F	G-E
Butyl	<b>Isobutylene Isoprene</b>	AA	R(S)	IIR	Over 1500	Over 2000	40-75	0.92	G	G	G	G
Butadiene	<b>Polybutadiene</b>	AA	R(S)	BR	Below 1000	Over 2500	40-80	0.94	E	G	G	E
EPDM or EP Rubber	<b>Ethylene Propylene</b>	BA, CA, DA	R(S)	EPDM	Below 1000	Over 2000	30-90	0.86	G	G	F	G-E
Neoprene	<b>Chloroprene</b>	BC, BE	SC	CR	Over 2000	Over 2000	15-95	1.23	E	E	G	VG
CPE	<b>Chlorinated Polyethylene</b>	BC, BE, CE	SC, SB	CM	Over 1500	Over 2500	60-90	1.16-1.32	F-G	F	F	G
Nitrile or NBR or Buna N	<b>Acrylonitrile Butadiene</b>	BF, BG, BK, CH	SB, SA	NBR	Below 1000	Over 2000	40-95	1.00	E	G	F	G
Urethane	<b>Polyester/ Ether Urethane</b>	BG	SB	AU, EU	3000 to 5000	3000 to 5000	30-75D	1.02-1.20	E	VG	E	O