

Common Name Base Polymer	Chemical Name	Material Designation (ASTM D-2000, SAE J 200 Classification)	ASTM D7-35, SAE J-4 & 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	Polyisoprene	AA	R(N)	NR	Over 3000	Over 3000	30-90	0.93	E	E	VG	E
SBR or GR-S or Buna S	Styrene Butadiene	AA	R(S)	SBR	Below 1000	Over 2000	40-90	0.94	E	G	F	G-E
Butyl	Isobutylene Isoprene	AA	R(S)	IIR	Over 1500	Over 2000	40-75	0.92	G	G	G	G
Butadiene	Polybutadiene	AA	R(S)	BR	Below 1000	Over 2500	40-80	0.94	E	G	G	E
EPDM or EP Rubber	Ethylene Propylene	BA, CA, DA	R(S)	EPDM	Below 1000	Over 2000	30-90	0.86	G	G	F	G-E
Neoprene	Chloroprene	BC, BE	SC	CR	Over 2000	Over 2000	15-95	1.23	E	E	G	VG
Nitrile or NBR or Buna N	Acrylonitrile Butadiene	BF, BG, BK, CH	SB, SA	NBR	Below 1000	Over 2000	40-95	1	E	G	F	G
Hypalon	Chlorosulfonated Polyethylene	CE	SC	CSM	Over 1500	Over 2500	40-90	1.12	E	G	F	VG
Silicone	Polysiloxane	FC, FE, GE	TA	PSi, PVSi, Si, VSi	Below 1200	Over 1200	20-85	1.14-2.05	E	E	P	P

O=Outstanding, E=Excellent, VG=Very Good, F=Fair, P=Poor

Common Name Base Polymer	Chemical Name	Compression Set	Resilience Cold	Resilience Hot	Dielectric Strength	Electrical Insulation	Impermeability to Gases	Acid Resistance Dilute	Acid Resistance Concentrated	Solvent Resistance, Aliphatic Hydrocarbons	Aromatic Hydrocarbons	Oxygenated (Ketones, etc.)
Common Name Base Polymer	Chemical Name	Compression Set	Resilience Cold	Resilience Hot	Dielectric Strength	Electrical Insulation	Impermeability to Gases	Acid Resistance Dilute	Acid Resistance Concentrated	Solvent Resistance, Aliphatic Hydrocarbons	Aromatic Hydrocarbons	Oxygenated (Ketones, etc.)
Natural Rubber	Polyisoprene	E	E	E	E	G-E	G	F-G	F-G	P	P	P
SBR or GR-S or Buna S	Styrene Butadiene	G	G	G	G	G	F	F-G	F-G	P	P	P
Butyl	Isobutylene Isoprene	F	P	VG	G	G	O	E	G	P	P	G
Butadiene	Polybutadiene	VG	O	E	G	G-E	G	F-G	F-G	P	P	P
EPDM or EP Rubber	Ethylene Propylene	G	G	VG	O	O	G	E	G	P	P	E
Neoprene	Chloroprene	G	G	VG	VG	F-G	G	E	G	F-G	F	P-F
Nitrile or NBR or Buna N	Acrylonitrile Butadiene	G	G	G	P	P	G	G	G	E	G	P
Hypalon	Chlorosulfonated Polyethylene	F	F	G	VG	G	E	E	G	F-G	F	P-F
Silicone	Polysiloxane	VG	E	E	G	E	F	E	F	P	P	P

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Common Name Base Polymer	Chemical Name	Lacquer Solvents	Resistance to: Swelling in Lubricating Oil	Resistance to: Oil and Gasoline	Resistance to: Animal Oils	Resistance to: Water Absorption	Resistance to: Oxidation	Resistance to: Ozone	Resistance to: Sunlight Aging	Resistance to: Heat Aging	Resistance to: Low Temperature	Resistance to: Flame	Resistance to: Vegetable Oils	Resistance to: Chlorinated Hydrocarbons
Common Name Base Polymer	Chemical Name	Lacquer Solvents	Resistance to: Swelling in Lubricating Oil	Resistance to: Oil and Gasoline	Resistance to: Animal Oils	Resistance to: Water Absorption	Resistance to: Oxidation	Resistance to: Ozone	Resistance to: Sunlight Aging	Resistance to: Heat Aging	Resistance to: Low Temperature	Resistance to: Flame	Resistance to: Vegetable Oils	Resistance to: Chlorinated Hydrocarbons
Natural Rubber	Polyisoprene	P	P	P	P	VG	G	P	P	F	VG	P	P	P
SBR or GR-S or Buna S	Styrene Butadiene	P	P	P	P	VG	F	P	P	G	VG	P	P	P
Butyl	Isobutylene Isoprene	F-G	P	P	F	VG	E	E	VG	VG	G	P	F	P
Butadiene	Polybutadiene	P	P	P	P	VG	G	P	P	F	VG	P	P	P
EPDM or EP Rubber	Ethylene Propylene	F-G	P	P	F	E	E	O	O	E	E	P	F	P
Neoprene	Chloroprene	P	G	G	F	G	VG	VG	VG	G	G	G	G	P
CPE	Chlorinated Polyethylene	F	G	G	F	VG	E	E	O	VG	G	G	F	P
Nitrile or NBR or Buna N	Acrylonitrile Butadiene	F	VG	E	E	G	G	F	P	G	F-G	P	E	F
Hypalon	Chlorosulfonated Polyethylene	P	G	G	F	G	VG	O	O	VG	G	G	P	P-F
Silicone	Polysiloxane	P	F	F	F	E	E	E	E	O	O	F	G	P-G

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