

	<b>Butyl</b>	<b>Hypalon</b>
Common Names	Butyl	Hypalon
ASTM D-2000 Classification	AA, BA	CE
Military (MIL STD 417)	RS	SC
Chemical Definition	Isoprene	Chlorosulfonated/ polyethylene
<b>GENERAL CHARACTERISTICS</b>		
Durometer Range (Shore A)	40 - 90	45 - 100
Tensile Range (P.S.I.)	500 - 3,000	1,000 - 3,000
Elongation (Max %)	850	500
Compression Set	Fair to Good	Fair
Resilience - Rebound	Fair	Fair
Abrasion Resistance	Fair	Excellent
Tear Resistances	Good	Good
Solvent Resistance	Poor	Fair to Good
Oil Resistance	Poor	Fair to Good
Low Temperature Usage (F°)	-10° to -60°	-30° to -60°
High Temperature Usage (F°)	to 250°	to 225°
Aging Weather - Sunlight	Excellent	Excellent
Adhesion to Metals	Good	Excellent

	<b>Buna-N</b>	<b>Neoprene</b>	<b>EPR</b>
Common Names	Buna-N, Nitrile, NBR	Neoprene®	EPR, EPT, EPDM
ASTM D-2000 Classification	BF, BG, BK	BC, BE	CA
Military (MIL STD 417)	SB	SC	RS
Chemical Definition	Butadiene Acrylonitrile	Polychloroprene	Ethylene Propylene
<b>GENERAL CHARACTERISTICS</b>			
Durometer Range (Shore A)	20 - 95	20 - 95	30 - 90
Tensile Range (P.S.I.)	200 - 300	500 - 3,000	500 - 2,500
Elongation (Max %)	600	600	600
Compression Set	Good	Good	Good
Resilience - Rebound	Good	Excellent	Good
Abrasion Resistance	Excellent	Excellent	Good
Tear Resistances	Good	Good	Fair
Solvent Resistance	Good to Excellent	Fair	Poor
Oil Resistance	Good to Excellent	Fair	Poor
Low Temperature Usage (F°)	+30° to -40°	+10° to -50°	-20° to -60°
High Temperature Usage (F°)	to 250°	to 250°	to 350°
Aging Weather - Sunlight	Poor	Good	Excellent
Adhesion to Metals	Good to Excellent	Good to Excellent	Fair to Good

	<b>Silicone</b>	<b>Fluorosilicone</b>	<b>Fluoro Elastomers</b>
Common Names	Silicone	Fluorosilicone	Fluoro Elastomers
ASTM D-2000 Classification	FC, FE, GE	FK	HK
Military (MIL STD 417)	TA	MIL-R-25988, Amend, 2	MIL-R-25897 and MIL-R-83248
Chemical Definition	Polysiloxane	Fluorosilicone	Fluorinated Hydrocarbon
<b>GENERAL CHARACTERISTICS</b>			
Durometer Range (Shore A)	30 - 90	50 - 80	60 - 90
Tensile Range (P.S.I.)	200 - 1,500	500 - 800	500 - 2,000
Elongation (Max %)	700	300	300
Compression Set	Good	Good	Good
Resilience - Rebound	Good	Excellent	Fair
Abrasion Resistance	Fair to Poor	Poor	Good
Tear Resistances	Poor	Poor	Good
Solvent Resistance	Poor	Fair	Excellent
Oil Resistance	Fair to Poor	Good	Excellent
Low Temperature Usage (F°)	-60° to -150°	-80°	+10° to -10°
High Temperature Usage (F°)	to 450°	300°	400° to 600° (depending on time and service)
Aging Weather - Sunlight	Excellent	Excellent	Excellent
Adhesion to Metals	Good	Poor	Good

	Natural Rubber	SBR	Urethane
Common Names	Natural Rubber	SBR, GRS	Urethane, Polyurethane
ASTM D-2000 Classification	AA	AA, BA	BG
Military (MIL STD 417)	RN	RS	SB
Chemical Definition	Polisoprene	Styrene Butadiene	Polyester/Polyether Urethane
<b>GENERAL CHARACTERISTICS</b>			
Durometer Range (Shore A)	20 - 100	30 - 100	35 - 100
Tensile Range (P.S.I.)	500 - 3,500	500 - 3,000	500 - 6,000
Elongation (Max %)	700	600	750
Compression Set	Excellent	Good	Poor
Resilience - Rebound	Excellent	Good	Good
Abrasion Resistance	Excellent	Excellent	Excellent
Tear Resistances	Excellent	Fair	Excellent
Solvent Resistance	Poor	Poor	Poor
Oil Resistance	Poor	Poor	Good
Low Temperature Usage (F°)	-20° to -60°	0 to -50°	-10° to -30°
High Temperature Usage (F°)	to 175°	to 225°	to 175°
Aging Weather - Sunlight	Poor	Poor	Excellent
Adhesion to Metals	Excellent	Excellent	Fair to Good