Elastomer Selection Guide

			PHYSICAL PROPERTIES				SERVICE TEMPERATURE				FLUID RESISTANCE						
POLYMER TYPE	QSR Code No.	Material Designation ASTM D2000 SAE J200	Hardness Range, Shore A, Pts.	Tensile Strength, Max., PSI	Elongation, Max. Percent	Com- pression Set	Continuous, Max. 1000 Hrs./Air	Low Ter	nperature Static	Ozone Resistance	Gasoline (Aromatics)	Gasohol—M (Methanol)	Gasohol—E (Ethanol)	Lube & Grease (Aliphatics)	Water	Acids	Oxygenated Solvents (Ketones)
Neoprene	J	BC, BE	30-95	4000	800	Good	225°F	–40°F	–65°F	Go od	Poor	Poor	Poor	Fair- Good	Good	Good- Excellent	Poor- Fair
Epichlorochydrin	F	СН	40-95	2500	350	Fair- Good	275°F	– 50℉	–75°F	Excellent	Good- Excellent	Fair- Good	Fair- Good	Excellent	Fair	Fair- Good	Poor- Fair
Hypalon®	E	CE	40-95	4000	500	Fair- Good	250℉	-40°F	– 60℉	Excellent	Poor- Fair	Poor	Poor	Fair- Good	Good	Excellent	Good
Nitrile (Buna-N)	E	BF, BG BK, CH	40-95	4000	800	Good	275°F	–30℉	–55°F	Poor- Fair	Good- Excellent	Fair- Good	Good	Excellent	Good- Excellent	Fair- Good	Poor
Fluorocarbon -Viton® -Fluorel®	С	НК	50-95	3000	500	Excellent	500℉	–5°F	– 40℉	Excellent	Exce llent	Good- Excellent	Excellent	Excellent	Good- Excellent	Good	Poor
Fluorocarbon (Kel-F®)	С	НК	55-85	3500	500	Good	425°F	-4 ℉	-40 ℉	Excellent	Good- Excellent	Good	Good	Excellent	Excellent	Excellent	Poor
Silicone	Α	FC, FE, GE	25-85	1500	800	Good- Excellent	525℉	–100℉	–180℉	Excellent	Poor	Poor	Poor	Fair	Excellent	Fair- Good	Fair- Good
Fluorosilicone	В	FK	40-85	1300	350	Good	450℉	–70°F	–100° F	Excellent	Good- Excellent	Good	Good- Excellent	Excellent	Excellent	Good- Excellent	Poor
EPDM - ER	Н	BA, CA, DA	30-95	3000	600	Good	300℉	–60°F	-8 0°F	Excellent	Poor	Poor	Poor	Poor- Fair	Excellent	Excellent	Good- Excellent
Polyacrylate	E	DF, DH	25-85	2500	400	Good	350℉	–20°F	-40 °F	Excellent	Poor- Fair	Poor	Poor	Good- Excellent	Poor- Fair	Poor- Fair	Poor
Butyl	D	AA	20-80	3000	800	Good	212℉	–70°F	–90°F	Good- Excellent	Poor	Poor	Poor	Poor	Good- Excellent	Excellent	Good- Excellent
Halo Butyl	Р	BA, CA	30-90	3000	800	Good	250℉	-70°F	–90°F	Good- Excellent	Poor	Poor	Poor	Poor	Good- Excellent	Excellent	Good- Excellent
Polyurethane	К	BG	40-95	5000	700	Poor	250℉	–50°F	–70°F	Good- Excellent	Fair- Good	Fair- Good	Good	Good	Fair	Poor- Fair	Poor
Polysulfide	L	AK, BK	30-90	1500	500	Poor	200℉	–40°F	–60° F	Good	Good	Good	Good	Excellent	Fair	Poor	Good- Excellent
SBR (GRS)	I	AA, BA	40-80	3500	600	Good	158℉	–55°F	–85°F	P oor	Poor	Poor	Poor	Poor	Good- Excellent	Fair- Good	Good
Natural Rubber	I	AA	30-90	4500	700	Good- Excellent	158℉	–55°F	–85°F	Poor- Fair	Poor	Poor	Poor	Poor	Excellent	Fair- Good	Good
Ethylene Acrylic (Vamac®)	L	EF	40-90	2500	700	Good- Excellent	350℉	–40°F	–60°F	Excellent	Poor- Fair	Poor	Poor	Good	Good- Excellent	Fair	Poor
PNF® (Fluoroelastomer)	С	EK	35-90	2000	200	Good	350℉	−7 0℉	−90 °F	Excellent	Good- Excellent	Fair- Good	Good	Excellent	Fair- Good	Poor- Fair	Poor
AFLAS® (Fluoroelastomer)	С	HK	60-95	3200	400	Good	400℉	+15℉	-50°F	Excellent	Fair	Fair	Fair	Excellent	Excellent	Ex cellent	Fair

Hypalon, Viton, and Vamac are DuPont Reg. Trademarks / Fluorel and Kel-F are 3M Company Trademarks

PNF (fluorolastomer) is a Firestone Tire & Rubber Co. Trademark / AFLAS is a Asahi Glass Co. Trademark

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