Comparison of Elastomer Properties

Common Name	Neoprene	Ethylene Propylene	Buna-N Nitrile	VAMAC®	Silicone	Fluoro-	VITON®	KALREZ®
ASTM D1418		EPM,			MQ, VMQ	-Silicone		
Designation	CR	EPDM	NBR	AEM	PVMQ	FVMQ	FKM	FFKM
ASTM D2000 Designation	BC, BE	CA, DA	BG, BK	EE, EP	FE, GE	FK	HK	HK+
Service Temperature								
Max. Continuous Service Temperature	105°C	150°C	121°C	150°C	230°C	175°C	204°C	316°C
Low Temperature Properties (Tg)	–50°C	–54°C	–30, –25°C	–16°C	–125, –85°C	–65°C	–30, –17°C	–8°C
Chemical Compatibility**								
Lubricating Oils	2	4	1	1	4	1	1	1
Fuel Oils	2	4	1	1	4	1	1	1
Hydraulic Oils	2	4	1	1	2, 3	1	1	1
Fireproof Hydraulic Fluids	2	1	3	4	3	4	4	1
Vegetable Oils, Animal Fats	2, 3	2, 3	1	1	1, 3	1	1	1
Gasoline (high octane)	3, 4	4	1, 2	3	4	1	1	1
Kerosene	2	4	1	2	4	1	1	1
Aromatic Hydrocarbons	4	4	2, 4	4	4	2, 3	1	1
Aliphatic Hydrocarbons	2	4	1	1	4	2	1	1
Alcohols	1	2	1	1	2	1, 2	1	1
Ketones	3, 4	1	4	4	4	4	4	1
Halogenated Solvents	4	4	4	3	4	1, 2	2	2
Water (<80°C)	1, 2	1	1	1	1	1	1	1
Water (>80°C)	3	1	1	1	1	1	1	1
Concentrated Acids	4	4	4	4	4	3	2	1
Diluted Acids	2, 3	2	3, 4	1	4	3	1	1
Alkalis	1, 2	1	2	4	1, 2	2	4	1
Mechanical Properties								
Tensile Strength, MPa	25	17	27	15	10	10	20	15
Hardness, Durometer, Shore A (D)	30–95	40–90	40–95	40–90	30–90	40–80	55–95	65–95

*Data has been drawn from tests at DuPont Dow facilities and industry sources. Data is presented for use only as a general guide and should not
be the basis for design decisions. See the back of this brochure for additional information about the data.

**Key: Chemical Compatibility: 1 = Satisfactory; 2 = Fair; 3 = Doubtful; 4 = Unsatisfactory.