

Types of rubber

Material	Natural rubber	Styrene butadiene rubber (Buna™)	Nitrile rubber (Perbunan™)	Chloroprene rubber (Neoprene™)	Ethylene propylene diene rubber (EPDM™)	Fluorine rubber (Viton™)	Methyl silicone rubber (Silopren™)	Polyvinyl chloride (Vestalit™, Vestolit™)
Abbreviations according to ASTM D 1418	NR	SBR	NBR	CR	EPDM	FKM	MQ/MVQ	PVC
Hardening (Shore A) (±5)	40-90	45-90	45-90	40-90	40-90	65-90	30-80	55-95
Resistance to tearing (N/mm ²) (B)	4-15	4-15	4-14	4-15	6-13	0	0	0
Spring-back elasticity at 20°C	++	+	0	+	+	0	0	
Abrasion resistance (B)	++	++	+	+	+	0	0	0
Chemical resistance (A)	+	+	0	+	++	++	+	++
Oil resistance (A)	-	-	++	+	-	++	+	+
Fuel resistance (A)	none	-	+	-	-	++	-	-
Solvent resistance (A)	-	-	+	+	0	0	+	0
Temperature resistance in °C (C)	-40 to +80	-30 to +80	-30 to +100	-25 to +100	-40 to +120	-20 to +200	-50 to +180	-25 to +60
Ozone resistance	0	0	0	++	++	++	++	0
Weather exposure resistance	+	+	+	++	++	++	++	+
Gas penetration resistance	0	0	+	+	0	0	+	
Resistance to permanent deformation (B)	++	+	+	+	+	0	0	0
Binding to metal	++	++	0	+	0	0	0	
Dielectric qualities	++	+	-	0	++	+	+	0

(A) Due to the great number of existing chemicals, possible temperatures and times of exposure, the stated qualities can vary from case to case.

(B) The qualities of the rubber become worse at relatively high or low temperatures.

(C) The stated ranges are accurate under normal circumstances. Extreme strains or environments will make the actual ranges smaller.

++ = Perfect or very good.

+ = Good.

0 = Average qualities.

- = Poor qualities.