

Overview of the properties of common vulcanized rubbers

(if required, the properties can be modified for your application)

	Natural Rubber	Styrene-Butadiene Rubber	Ethylene Propylene Diene Rubber	Butyl-Rubber	Chloroprene Rubber	Chlorosulfonated Polyethylene	Chlorinated Polyethylene	Epichlorohydrin Rubber	Nitrile Butadiene Rubber	Hydrogenated Nitrile Butadiene Rubber	Polyurethane Rubber	Polyacrylate Rubber	Ethylene Acrylate Rubber	Fluororubber	Silicone Rubber	Fluorosilicone Rubber
International Abbreviation	NR	SBR	EPDM	IIR	CR	CSM	PE-C	CO/ECO	NBR	HNBR	EU/AU	ACM	AEM	FKM	VMQ	FVMQ
Hardness range (in Shore)	25A-70D	20A-95A	20A-95A	30A-80A	20A-90A	45A-90A	60A-95A	40A-90A	20A-75D	50A-95A	55A-90A	50A-90A	50A-90A	50A-90A	20A-90A	40A-80A
Mechanical properties at room temperature																
Tensile strength	++	+	0	0	+	+	0	0	+	++	++	0	0	0	0	0
Elongation at break	++	+	0	++	+	0	0	0	+	0	+	0	+	0	++	0
Rebound resilience	++	+	+	--	0	-	-	0	0	0	0	--	0	--	+	-
Tear strength	++	0	0	0	+	0	-	-	0	-	-	-	-	-	-	-
Abrasion resistance	0	+	0	-	+	0	0	0	+	++	+	-	-	-	-	--
Compression set																
At max. continuous operating temp.	0	0	-	0	-	+	-	0	-	0	-	0	0	--	--	--
At room temperature	-	-	--	-	-	0	-	-	-	0	0	0	0	--	--	--
Operating temp. continuous operation																
Minimum	-55	-45	-50	-60	-40	-30	-30	-45	-45	-40	-40	-30	-40	-30	-50	-65
Maximum	80	90	130	130	100	125	135	130	110	150	120	160	160	220	210	200
Resistance																
Fuel	--	--	--	--	-	-	-	0	0	0	0	--	-	++	--	+
Oil and grease	--	--	-	--	+	0	0	++	++	++	0	++	+	++	+	++
Acids	-	-	++	++	0	++	++	-	-	0	--	--	+	++	0	0
Bases	0	-	++	++	0	+	+	0	-	0	--	--	-	++	-	-
Water	-	-	++	++	0	+	+	0	0	+	--	-	+	++	0	0
Ozone, UV-Light	-	-	++	+	++	++	++	++	-	++	++	++	++	++	++	++



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Rating

High ++

Middle o

Low --

Please note:

This table only provides a rough overview of the respective properties. Adaptation to customer-specific requirements must be checked on a case-by-case basis.