

Typical characteristics of vulcanized rubbers (on demand special modifications are possible at any polymer)		Natural Rubber	Styrene Butadiene Rubber	Ethylene Propylene Diene Rubber	Butyl Rubber	Chloroprene Rubber	Chlorosulphonated Polyethylene	Chlorinated Polyethylene	Epichlorohydrine Rubber	Nitrile Rubber	Hydrogenated Nitrile Rubber	Polyurethane Rubber	Polyacrylate Rubber	Ethylene-Acrylate- Rubber	Fluoro Rubber	Silicone Rubber	Fluorosilicone Rubber
International abbreviation		NR	SBR	EPDM	IIR	CR	CSM	CM	CO/ECO	NBR	HNBR	EU/AU	ACM	AEM	FKM	VMQ	FVMQ
KRAIBURG polymer code		NN	BB	AA	UU	CC	HH	CM	KK	PP	VT	UA	VC	VV	VA	F	FF
Hardness range (Shore A)		25A-70D	20A-95A	20A-95A	30A-80A	20A-90A	45A-90A	60-95A	40A-90A	20A-75D	50A-95A	55A-90A	50A-90A	50A-90A	20A-90A	40A-80A	
Mechanical characteristics at room temperature	Tensile strength	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Elongation at break	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Rebound resilience	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Tear strength / Tear resistance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Abrasion resistance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Compression set	at max. continuous service temperature	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	at room temperature (RT)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thermal properties	Low temperature performance (Tg) down to °C	-55	-45	-50	-60	-40	-30	-30	-45	-45	-40	-40	-30	-40	-30	-50	-65
	Max. continuous service temperature up to °C	80	90	130	130	100	125	135	130	110	150	120	160	160	220	210	200
Resistance against	Gasoline	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●
	Mineral oil (at 100°C)	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●
	Water diluted anorganic acids at room temperature	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Water diluted anorganic lyes at room temperature	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Water (at 100°C, dist.)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Weathering and ozone	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Assessment



high



moderate



low

This table can only act as a rough indicator / guideline for the characteristics of the various types of vulcanized rubber. A selection of specific compounds is not possible, because adjustment of properties (like e.g. hardness) can negatively influence other features.

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