

international marking	NR	SBR	NBR	HNBR	CR	EPDM, EPM, APTK	CSM	ECO	IIR	FPM, FKM	MVQ, SI	PUR	
trade name		BUNA	Perbunan®, Hycar®, Krynac®, Elaprim®, Chemigum®, JSR-N®	Therban®	Neoprene®	NORDEL®, KELTAN®, Vistalon®, Buna AP®, Dutral®, APTK®	Hypalon®	Herclor	polysar Butyl	Viton®, Tecnoflon®, Fluorel®, DAI-EL®	Silicone, Silopren®, Silastic®, SE®, Blensil®	Vulkolan®	
chemical name	natural rubber	styrene-butadiene rubber	Acrylonitrile-butadiene rubber	hydrogenated NBR	chloroprene rubber	ethylene-propylene terpolymer	chlorosulfonated polyethylene	epichlorohydrin	butyl rubber	fluor rubber	silicone rubber	polyurethane	
available hardness	30° - 90° Shore A	35° - 95° Shore A	25° - 95° Shore A	40° - 90° Shore A	30° - 90° Shore A	30° - 90° Shore A	50° - 95° Shore A	50° - 90° Shore A	40° - 85° Shore A	65° - 95° Shore A	40° - 80° Shore A	55° - 95° Shore A	
temperature resistance	-40° C bis +80° C	-30° C bis +80° C	-30° C bis +120° C	-40° C bis +175° C	-30° C bis +100° C	-40° C - +130° C	-30° C bis +120° C	-40° C bis +130° C	-30° C bis +120° C	-20° C bis +200° C	-70° C bis +180° C	-30° C bis +80° C	
short term peak temperature	+100° C	+130° C	+130° C	+200° C	+150° C	+170° C	+175° C	+150° C	+140° C	+350° C	+225° C	+100° C	
tensile strength in N/mm ²	25	25	25	30	25	20	18	17	17	20	8	30	
elongation	800%	450%	500%	150% - 600%	450%	450%	300%	150% - 500%	400% - 800%	400%	250%	800%	
characteristics	MEINERT GMBH												
abrasion resistance	+++	+++	+++	+++	++	++	--	--	++	--	--	+++	
bending crack resistance	+++	++	--	+++	++	+++	++	++	--	++	--	-	
expansion / tenacity	+++	++	++	++	++	++	++	++	++	++	++	+++	
elasticity	+++	++	++	++	++	++	++	--	--	--	++	++	
impact resistance	+++	++	++	++	++	--	++	++	++	+/-	--	+++	
light resistance	--	--	--	++	+++	+++	+++	++	+++	+++	+++	++	
oxidation resistance	--	--	--	++	+++	+++	+++	++	+++	+++	+++	++	
ozone resistance	--	--	--	++	+++	+++	+++	+++	+++	+++	+++	++	
friction resistance	+++	+++	+++	++	+++	++	++	-	++	+/-	--	+++	
atmospheric influence	++	++	--	++	+++	+++	+++	++	+++	+++	+++	--	
stability against	MEINERT GMBH												
brines	++	++	++	++	+++	+++	+++	--	+++	+++	---	---	
benzine	--	--	+++	++	--	--	--	++	--	+++	---	+++	
benzol	--	--	--	--	--	--	--	++	--	++	---	---	
groceries*	++	++	++	--	++	++	++	--	++	---	+++	---	
dissolver aliphatic	--	--	+++	+++	--	--	--	++	--	+++	---	+++	
dissolver aromatic	--	--	+/-	+/-	--	--	--	++	--	++	---	--	
dissolver halogenes	--	--	--	+/-	--	--	--	---	--	++	---	--	
petroleum and greases	--	--	+++	+++	++	--	++	+++	--	++	++	+++	
acids	+/-	+/-	+/-	-- / +/-	++	+++	+++	--	+++	+++	---	---	
water	++	+++	++	+++	+++	+++	++	--	++	++	++	---	
example of use	MEINERT GMBH												
	advantages	is characterized by elasticity and cold resistance; ideal for rubber-metal-products	similar to natural rubber	eminently resistant to age	even at higher temperatures, excellent abrasion resistance	utmost resistant; good electric strength	resistant to age; applicable against flushing fluids	fadeless; good electric strength	Sehr hohe Quellbeständigkeit gegen Öle und Treibstoffe; Gute Kälteflexibilität; Sehr geringe Gas- und Treibstoff-Durchlässigkeit (nur CO)	good electrical properties (insulating); Extremely low gas permeability; Easy to color	very high temperature resistance, does not burn in it's own flame	poison free sterilizable acc. Food laws; resistant to sea water and corrosive salt solutions	the best elasticity at high shore hardnesses of all elastomers
	disadvantages	bad oil resistance	lower notch resistance than natural rubber	bad ozone and weather resistance	bad low temperature resistance	depending on the CR-type material may tend to crystallize during sustained cold	low resistance to aliphatic and aromatic hydrocarbons (mineral oils, fuels, etc.)		no resistance to aromatics; Moderate to poor ester- and ketone-resistance, self-extinguishing	low rebound elasticity, can not be blended with other elastomers	unsuitable for ester and ketone	intense bulking with aromatic solvents	not resistant to hydrolysis
advantages	rubber-metal spring elements, belts, hoses	car tires, hoses	seals, O-rings, hoses	car hoses, gaskets, profiles	V-belts, hoses, gaskets	cable coatings, industrial and washing machine hoses	roll covers, gaskets, films, molded articles	seals, membrane, tubes	automotive hoses, steam hoses, gaskets, membranes	seals, hoses and fittings that are claimed at 200 ° C or with harsh chemicals	medical and pharmaceutical products, food hoses	gears, damping elements, seals	

* just with special prescription

We can not guarantee for the mentioned properties due to the fact that every practical case has to be observed individually in relation to temperature, concentration etc.. Therefore all specifications have to be seen as guideline values. The Meinert GmbH excludes all liability for any equipment damage and personal injury or harm, even to the rights of third parties.

+++	++	+/-	--	---
excellent / outstanding	good	conditional	modest	inappropriate