

8.2. Technische gegevens elastomeren volrubberprofiel
Données techniques des élastomères pour profilés
Technical data elastomeres rubber profiles
Technische Angaben Vollgummiprofile

Elastomers and their various properties

Chemical Nomenclature	Natural Rubber	Styrol-Butadien-Buna S	Nitril-Rubber Buna N (Perbunan)	Chloroprene Rubber (Neoprene)	Ethylene Propylene	Fluor Rubber (Viton)	Methyl Silikon	Poly vinylchlorid
Abbreviation as per ASTM D 1418	NR	SBR	NBR	CR	EPDM	FPM	MQ/MVQ	PVC-soft
Shore A								
Hardness Range (±5)	40-90	45-90	45-90	40-90	40-90	65-90	30-80	55-95
Tensile Strength N/mm ²	4-15	4-15	4-14	5-15	6-13	8-15	4-12	0
Recoil Elasticity at 20°C	++	+	0	+	+	0	0	
Abrasion Resistance	++	++	+	+	+	0	0	0
A Chemical Resistance	+	+	+	+	++	+++	+	++
A Oil Resistance	-	-	++	+	-	++	+	+
A Petrol Resistance	none	-	+	-	-	++	-	+
A Solvent Resistance	-	-	+	+	0	0	+	0
A Temp Stability in °C	-40 to +80	-30 to +80	-30 to +100	-30 to +90	-50 to +130	-20 to +200	-50 to +200	-30 to +70
Ozone Resistance	0	0	0	++	+++	++	++	0
General Climate Resistance	0	+	+	++	++	++	++	+
Gas Impermeability	0	0	+	+	0	+	-	
B Resistance to permanent deformation	++	+	+	+	+	+	0	0
Adhesion to metal	++	++	0	+	0	0	0	
Dielectric Properties	++	+	+	0	++	+	+	0

A = In view of the multitude of chemicals, solvents, application temperatures and times the value quoted may vary in some cases. For example one type of elastomer which normally has only low resistance properties could show very good resistance to certain media.

B = At relatively high or low temperatures, resistance generally drops.

C = These are borderline values which, depending on the composition of the mixture, can vary.

If used permanently in such borderline areas, this can lead to a change in the physical values. For such extreme applications it is advisable to use special elastomer mixtures.

++ = excellent to very good

+ = good

0 = satisfactory

- = low to very poor

8.3. Technische gegevens elastomeren sponsrubberprofiel
Données techniques des élastomères pour profilés mousse
Technical data elastomeres sponge rubber profiles
Technische Angaben Moosgummiprofile

Eriks data sheet cellular & spongerubber profiles

Type	Neoprene® CR fest cellular rubber	HE/NR sponge rubber	HE/SN1* sponge rubber	HE/CR sponge rubber	HE/EPDM sponge rubber	HE/NBR sponge rubber	HE/FPM sponge rubber	HE/SN2* sponge rubber	HE/SN40* sponge rubber
Quality	Neoprene	rubber	Silicone	Neoprene	EPDM	Nitrile	Viton®	Silicone	Silicone
Density kg/m ³	180-220	580-630	400-550	650-750	550-6000	500-600	650-750	750-950	350-500
Temperature test (°C)	-30/+110	-40/+70	-70/+200	-40/+110	-40/+120	-50/+70	-20/+200	-70/+200	-70/+200
Corrosion test	excellent	satisfactory	excellent	excellent	excellent	good	excellent	excellent	excellent
Flammability test	self-extinguishing	burns	white ashes	self-extinguishing	burns	burns	self-extinguishing	white ashes	white ashes
Compression set (%) DIN 53517									
• 24 h at 23°C	40-48	20-30	16-22	10-20	30-40	20-30	-10% (70°C)	6-12	15-20
• 24 h at 70°C	85-95	50-60	30-35	50	50-60	60-70	50% (200°C)	8-15	20-25
Compression deflection ASTM D 1056 for 25% compression in KPa	45-60	100-130	60-90	90-120	100-140	100-150	+1000	350-450	40-80
Colour	black	black	standard white or red	black	black	black	black	white	white
Remarks	also self-adhesive		standard quality in stock		cheaper than Neoprene	is not standard min. prod.	minimum production		

*After special treatment the max. temperature can rise up to +250.