

MVQ

Color – reddish-brown (russet)

MVQ – is an elastomer based on methyl-vinyl silicone rubber. In compare with other rubbers, MVQ has low mechanical characteristics, therefore primarily used for production of static parts. MVQ has excellent ozone, weather and ageing resistance. The oil compatibility depends on the content of aromatic hydrocarbons in the oil.

MVQ is soot free and is suitable for electrical insulation

Temperature range: from -60° up to +200°C (short term up to +230°C). Swelling in mineral oils is low, but depends very much on the composition of the oil. The compatibility with additivated oil is better, than in case with NBR. MVQ has a high gas permeability.

Resistance

Good resistance	Low resistance
Engine and transmission oil of aliphatic nature, also sulfur oils	Aromatic mineral oils
Brake fluids based on glycol	Fuel
Adipose and vegetable oils	Silicone oils and grease
Water	Aromatic hydrocarbon (toulene, benzol)
Fire-resistant pneumatic fluids HFD-R (phosphoric acid ester) and HFD-S(chlorinated hydrocarbons)	low molecular weight chlorinated hydrocarbons (trichlorethylene)
Dilute salt solutions	Overheated steam up to 120°C (only short time steam sterilization is possible)
	Acids and alkalis

Application

MVQ can be used for production of O-Rings and other seal parts. MVQ is mainly used in cases where are no other alternatives because of high temperatures and chemical stress. Due to its low mechanical properties use should be reduced to static application.

MVQ is used as a sealing material in the pharmaceutical and food industry.

Mainly used

- Special seals in the chemical and food industry
- Rotary shaft seals for special use
- O-rings

MVQ Material Data Sheet

Properties	Value	Unit	Standard
Hardness	82 +/-3	Sh A	DIN 53505
Density	1,506	g/cm ³	DIN 53479 or DIN EN ISO 1183-1
Compression set 175°C / 22 h	12,5	%	DIN 53517 or DIN ISO 815-1
100 % modulus	5,2	MPa	DIN 53504
Rebound resilience	54	%	DIN 53512
Tensile strength	6,4	MPa	DIN 53504
Elongation at break	181	%	DIN 53504
Tear strength	13,9	N/mm	DIN 53515 or DIN ISO 34-1 A
Abrasion	-	mm ³	DIN 53516
Min. service temperature	-60	°C	
Max. service temperature	+200	°C	