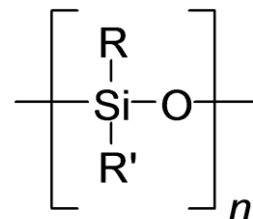


Methyl-Vinyl-Silicone Elastomer (Silicon MVQ/FDA)



SPECIFICATIONS

Property	Spec	Value
Hardness	ISO 868	85 ± 5
Modulus @ 100%	DIN 53504	≥5
Tensile Strength	DIN 53504	≥7
Elongation at Break	DIN 53504	≥100%
Tear Strength (kN/m)	DIN ISO 34-1	≥16.4
Specific Gravity (kg/m ³)	ISO 1183	1470
Rebound Elasticity	DIN 53 512	52%
Abrasion	DIN 53 516	-
Compression Set: 24h, 70C @ 25% def	ISO 815	10%
Compression Set: 24h, 100C @ 25% def	ISO 815	≤27.8
Compression Set: 24h, 150C @ 25% def	ISO 815	-
Min Service Temp.		-60° C -76° F
Max Service Temp.		200° C 392° F
Max Service Temp. Water/Steam		110° C 230° F
Maxi Temperature Hot Air/Short		300C 572F
Color		White

DESCRIPTION

MS14 is a Silicon material with hardness 85 Shore A, specially compounded for food applications. The unique chemistry of silicone elastomer is the presence of the silicon-oxygen (Si-O) backbone instead of a carbon-carbon bond present in most polymers. The silicon-oxygen bond is flexible as well as stable over an extended range of temperatures. This same chemical structure has extraordinary resistance to oxidation degradation. Many different side groups can be attached to the Si-O backbone to modify the chemistry for particular applications. Carbon-carbon double bonds are attached as a side group for vulcanization to improve compression set and hot oil resistance. Compared with other elastomers, silicone has rather mediocre tensile, abrasion and tear strength due to the weak strength of Si-O bond. To achieve useful engineering performance, silicone elastomers are often reinforced with high surface area fillers. Silicone elastomer articles are molded by compression, transfer, extrusion or injection processes.