

SILICON nature FDA - MVQ
Vinyl methyl silicone rubber
Mechanical, Physical and Thermal Properties

properties	condition	standard	unit		unit	
colour				translucent		translucent
hardness	23°C	ISO 868	Shore A	85 ± 5	Shore A	85 ± 5
modulus 100%	23°C	DIN 53 504	MPa	≥ 4	psi	≥ 580
tensile strength	23°C	DIN 53 504	MPa	≥ 8	psi	≥ 1160
elongation at break	23°C	DIN 53 504	%	≥ 250	%	≥ 250
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 8	lbf/inch	≥ 45
spec. gravity	23°C	ISO 1183	kg/m ³	1225	g/cm ³	1,22
rebound elasticity	23°C	DIN 53 512	%	38	%	38
abrasion	23°C	DIN 53 516	mm ³		mm ³	
compression set	*	ISO 815	%	≤ 14	%	≤ 14
compression set	**	ISO 815	%	≤ 7	%	≤ 7
compression set	***	ISO 815	%	≤ 20	%	≤ 20
minimum service temperature			°C	-60	°F	-76
maximum service temperature			°C	200	°F	392
temp. max water/steam			°C	110	°F	230
temp. max hot air, short			°C	300	°F	572

* 24h 70°C 25% def.

** 24h 100°C 25% def.

*** 24h 175°C 25% def.

Chemical Properties

Copolymer, based on methyl, vinyl and silicone

Resistant to: hot air, ozone, hot water and acetic acid

Not resistant to: aliphatic and aromatic hydrocarbons and esters

Foodstuff approval: FDA compliant in its active substances to § 177.2600, CFR 21
"Rubber Articles Intended for Repeated Use"