

Material name, short description	VMQ
Material name, based on technical standards	Vinyl methyl silicone elastomer
Material description / intended use	Silicone elastomer with good mechanical properties over a wide temperature range.
Color	red
Compound code	VMQ 70.00-02
Crosslinking/curing agent	Peroxide
Manufacturing process	moulded parts

Mechanical properties

Hardness nominal	70 ±5 IRHD ASTM D 1415
Density nominal	1.38 ±0.03 g/cm ³ ASTM D 297
Tensile strength	7.9 N/mm ² ASTM D 412
Elongation at break	178 % ASTM D 412
Compression set	14 % ASTM D 395-B 22 h, 175 °C

Thermal properties

Operating temperature min.*	-55 °C
Operating temperature max.*	200 °C
TR 10 value	-42 °C ASTM D 1329
Brittleness point	-55 °C ASTM D 2137

* Approximate value, dependent on the application

Storage in medium 1

Medium	IRM 901 Oil (ASTM 1)
Test parameter	70 h, 150 °C
Test standard	ASTM D 471
Value change	Hardness: -6 Points Tensile strength: +4 % Elongation at break: -12 % Volume: +7 %

Storage in medium 2

Medium	IRM 903 Oil (ASTM 3)
Test parameter	70 h, 150 °C
Test standard	ASTM D 471
Value change	Hardness: -12 Points Volume: +35 %

Air aging 1

Test parameter	70 h, 225 °C
Test standard	ASTM D 573
Value change	Hardness: +4 Points Tensile strength: -11 % Elongation at break: -26 %

In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.