



G-M-I, Inc. Product Data Sheet Rubber Polymers (Elastomers)

Compound: VMQ (Silicone)
Curing Agent: Platinum

No.	SPC50	SPC80
-----	--------------	--------------

P = Platinum Color(Clearish/Thanslucent)*

Physical Properties:

Test Method	Property	50 Durometer (Dow C6-150)		80 Durometer (Dow C6-180)	
		Specification	Typical	Specification	Typical
ASTM D-2240	Durometer Hardness Shore A, Points	50±5	52	80±5	79
ASTM D-412	Tensile Strength (Yield Stress), Min. PSI / mPa	870/6	1345/9	870/6	1063/7
ASTM D-412	Ultimate Elongation, % Min.	250	800	100	657
ASTM D-297	Specific Gravity (Density), lb/ft ³ / kg/m ³	1.18±.03/19.0±.5	1.18/19.0	1.20±.03/19.3±.5	1.20/19.3
ASTM D-624	Tear Resistance Die B, Min. PPI / N/mm	51/9	232/41	51/9	220/39
ASTM D-395	Compression Set, 22 hrs at 175°C, % Max.	50	27	50	25
ASTM D-573	Heat Aged, 70 hrs at 225°C: Hardness Change, Pts Tensile Strength Change, % Max. Ultimate Elongation Change, % Max.	±15	+5	±15	+1
		±30	-10	±30	-19
		-50	-25	-50	-10
ASTM D-471	Water Resistance, 70 hrs at 100°C: Hardness Chg Pts Volume Change, % Max.	±5	+1	±5	0
		±5	+0.05	±5	+0.1
ASTM D-412	Modulus;	100%, PSI/mPa	---	140/1	---
		200%, PSI/mPa	---	290/2	---
		300%, PSI/mPa	---	745/5	---
Temperature Range	-76/+400°F (-60/+204°C)				
Shelf Life	Maximum Storage Life: Unlimited per SAE ARP5316 Rev C 2010-12, 20 Years per MIL-HDBK-695E 20/October/2011.				

*Colors: A = Gray, B = Black, G = Green, K = Khaki, L = Purple, N = Brown, O = Orange, R = Red, U = Blue, W = White and Y = Yellow are available but on a Special Order Basis.

Applications:

VMQ (Silicone), platinum cured, offers the utmost in purity and cleanliness for food and dairy, healthcare and pharmaceutical applications. It has excellent resistance to oxidation, ozone, sunlight and most chemicals. It is not recommended for applications that require resistance to gasoline, kerosene, nitric acids, mineral oils and sulfuric acids.

Standards/Regulations, Independently Tested and Certified Compliant:

Standard/Regulation	Description	
ISO 9001	Quality Management System	
US Food and Drug Administration	Title 21, Part 177, SubPart C, Sec. 177.2600, Substances for Use Only as Components of Articles Intended for Repeated Use in Food, CITE: 21CFR177.2600.	
USDA	US FSIS (Food Safety Inspection Service) per the FDA 21CFR7.12 and 21CFR7.13 Regulations for Direct and Incidental Food Contact Materials for Intended Use as Specified in the above FDA 21CFR177.2600 Regulations.	
3-A Sanitary Standards	Multiple Use-Rubber and Rubber-Like Materials Used as Product Contact Surfaces in Dairy Equipment, 18- . Authorization No.: 1294.	
USDA, NSF/3-A/ANSI 14159-3-2005	Standards for the Sanitary and Hygiene Design and Fabrication of Dairy Processing Equipment.	
EU 1935/2004(03)EC	Food Contact Regulations.	
US Pharmacopeia: European Pharmacopoeia:	Cytotoxicity and USP Class V and VI. Monograph 3.1.9, Silicone, Volatile Matter.	Compounds: SPC50 & SPC80
US FDA 9CFR94.18, FDA 21CFR589, US Pharmacopeia Vol 30<5>, EU 2004/C 24/03, EU 2002/195/EC, EU EMEA/410/01, CPMP/QWP/227/02, CVMP/134/02 & CVMP/145/197	AH/TSE Free™ Animal and Human / Transmissible Spongiform Encephalopathy Free (Animal and Human Derived Ingredient Free)	
EU RoHS Directive 2002/95/EC	Restrictive Substances, EIA Material Composition Annex A: Level A Materials, Table I & Table II.	
China RoHS Directive SJ/T11363-2006	Hazardous Substances, Table I.	
CODEX Std 192-1995	Not yet listed.	

The information contained herein is furnished free of charge and is based on data that G-M-I, Inc. believes to be reliable. It is intended for use by persons having technical skill, at their own discretion and risk. Because conditions of product use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of the information. As with any material, evaluation of any compound under end-use conditions prior to specification is essential. Values are subject to correction and revision.

Rev. 04/2017