

产品说明

DuPont™ Vamac® G is a terpolymer of ethylene, methylacrylate, and a cure site monomer. It is cured using an amine-based vulcanization system. This gum elastomer includes a small amount of processing aid, and has a nominal specific gravity of 1.03. It has a mild acrylic odor. Use adequate ventilation during storage, mixing, and processing to prevent accumulation of residual vapors. Storage stability is excellent.

Vamac® G has excellent high-temperature durability and oil resistance with service lubricants, coupled with good low-temperature flexibility. Compounds of Vamac® G are typically rated at 175°C (347°F) for heat resistance, with oil swell values around 50% in IRM 903 oil. The properties of Vamac® G make it well suited for a wide range of automotive applications, including powertrain seals and gaskets, rocker cover and piston seals, oil coolant hoses, power steering hoses, turbocharger hoses, crankcase ventilating tubes, coverings for fuel and coolant hoses, O-rings, grommets and spark plug boots.

Vamac® G is an excellent vibration damping material that is uniquely insensitive to temperature over a range of -30°C (-22°F) to 160°C (320°F). Compounds of Vamac® G are suitable for use in torsional dampers and isolator pads.

Vamac® G is a halogen-free polymer and does not decompose to give off corrosive gasses when exposed to flame. It is used for flame-retarded, low-smoke, nonhalogen wire and cable jackets and in nonhalogen, low-smoke flooring.

Vamac® G is well suited for injection, transfer and compression molding, and is easily extruded.

总体

材料状态	• 已商用：当前有效		
供货地区	• 北美洲	• 欧洲	
添加剂	• 加工助剂		
性能特点	• 低温下的柔性 • 毒性低 • 减震 • 耐热性，高	• 耐用性 • 耐油性能 • 无卤 • 无粘性	• 烟释放，低 • 阻燃性能
用途	• 地板材料 • 电线电缆应用 • 垫圈	• 垫圈 • 管道 • 管道	• 密封 • 汽车的发动机罩下的零件 • 汽车领域的应用：
外观	• 清晰/透明		
形式	• 包		
加工方法	• 挤出 • 树脂传递成型	• 压缩模塑 • 注射成型	

物理性能

物理性能	额定值 单位制	测试方法
门尼粘度		ASTM D1646
MS 1, 121°C	> 16 MU	
ML 1+4, 100°C	17 到 40 MU	

弹性体	额定值 单位制	测试方法
拉伸应力		
100%应变 ²	4.80 MPa	ASTM D412
100%应变 ³	4.70 MPa	ASTM D412
100%应变 ⁴	5.20 MPa	ASTM D412
100%应变	5.10 MPa	ASTM D412
100%应变 ⁵	6.40 MPa	ASTM D412
抗张强度		ASTM D412
屈服 ²	8.80 MPa	
屈服 ³	11.3 MPa	
屈服 ⁴	13.8 MPa	
屈服	16.6 MPa	
屈服 ⁵	15.3 MPa	
屈服 ⁶	14.1 MPa	
伸长率		ASTM D412
断裂 ²	190 %	
断裂 ³	150 %	
断裂 ⁴	220 %	
断裂	280 %	
断裂 ⁵	230 %	
断裂 ⁶	300 %	
压缩永久变形		ASTM D395
150°C, 70.0 hr	16 %	
150°C, 168 hr	21 %	
150°C, 336 hr	26 %	
150°C, 504 hr	30 %	
150°C, 1010 hr	40 %	
177°C, 168 hr	24 %	
硬度	额定值 单位制	测试方法
硬度计硬度		ASTM D2240
支撑 A ²	48	
支撑 A ³	58	
支撑 A ⁴	57	
支撑 A	68	
支撑 A ⁵	77	
支撑 A ⁶	66	
热性能	额定值 单位制	测试方法
脆化温度		ASTM D3418
-- ⁷	-32.6 °C	
-- ⁸	-27.9 °C	
老化	额定值 单位制	测试方法
体积变化		ASTM D471
150°C, 70 hr, ASTM 标准油 (1号)	9.0 %	
150°C, 70 hr, 在IRM 903油中	60 %	
150°C, 1008 hr, Dexron® III ATF	28 %	
150°C, 1008 hr, 在SF105油中	32 %	
补充信息	额定值 单位制	测试方法
Mooney Scorch - Time to 10-unit rise (121°C)	13.0 min	ASTM D1646
挥发性	< 0.4 wt%	Internal Method

Vamac® G
乙烯丙烯酸弹性体
DuPont Performance Elastomers
备注

2012年8月7日

¹ 一般属性：这些不能被视为规格。
² Aged 70 Hrs at 150°C (302°F) Immersed in IRM 903
³ Aged 1008 Hrs at 150°C (302°F) Immersed in SF-105 Oil
⁴ Aged 1008 Hrs at 150°C (302°F) Immersed in GM Dexron® III ATF
⁵ Aged 1008 Hrs at 150°C (302°F) in Air
⁶ Aged 70 Hrs at 150°C (302°F) Immersed in ASTM #1 Oil
⁷ Initial
⁸ Inflection