

Elastoprene 65A-1000

Thermoplastic Vulcanizate

KMI Group, Inc.

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Technical Data

Product Description

Attributes:

- Elastoprene TPV is a thermoplastic elastomer containing fully vulcanized EPDM rubber.
- It is ideal solution for applications requiring long term sealing performance even at elevated temperatures up to 135°C (275F).
- Can be processed using conventional thermoplastic processing equipment. Suitable for injection molding, blow molding, profile and sheet extrusion applications.
- Elastoprene TPV is supplied in weatherable (UV stabilized) black.
- Elastoprene TPV is in compliance with FDA, CFR title 21 Section 177.2600 "Rubber articles intended for repeated use"; and 177.1210 "Closures with sealing Gaskets for food Containers".

Applications:

Elastoprene is a cost effective solution for replacing Santoprene rubber, styrenic-based TPEs, and thermoset rubbers such as EPDM, and Polychloroprene. It is an excellent choice for applications requiring flexibility in the following markets: automotive parts, appliance, business machines, construction, consumer products, and electronics.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Additive	• Rubber ¹ • UV Stabilizer
Features	• Good Colorability • Good Flexibility • Good Heat Seal • Soft • UV Resistant
Uses	• Appliances • Automotive Applications • Business Equipment • Construction Applications • Consumer Applications • Electrical/Electronic Applications • Flexible Grips • Handles
Agency Ratings	• FDA 21 CFR 177.1210 • FDA 21 CFR 177.2600
Appearance	• Black
Processing Method	• Extrusion • Injection Molding • Profile Extrusion • Sheet Extrusion

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.972	0.970 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ³ (230°C/10.0 kg)	8.0 to 15 g/10 min	8.0 to 15 g/10 min	ASTM D1238
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress ⁴ (100% Strain, 73°F (23°C))	421 psi	2.90 MPa	ASTM D412
Tensile Strength ⁴ (Yield, 73°F (23°C))	1160 psi	8.00 MPa	ASTM D412
Tensile Elongation ⁴ (Break, 73°F (23°C))	550 %	550 %	ASTM D412
Tear Strength ⁵ (73°F (23°C))	211 lbf/in	37.0 kN/m	ASTM D624
Compression Set			ASTM D395
158°F (70°C), 22 hr	35 %	35 %	
257°F (125°C), 70 hr	51 %	51 %	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 5 sec	68	68	
Shore A, 15 sec	65	65	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-85.0 °F	-65.0 °C	ASTM D746
Melting Temperature	317 °F	159 °C	
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Ozone Resistance ⁶	Excellent	Excellent	ASTM D1149



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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	180 °F	82 °C
Drying Time	3.0 hr	3.0 hr

Extrusion	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	150 °F	66 °C
Drying Time	3.0 hr	3.0 hr

Notes

¹ EPDM

² Typical properties: these are not to be construed as specifications.

³ Procedure A

⁴ 20 in/min (500 mm/min)

⁵ Die C, 20 in/min (500 mm/min)

⁶ 500 hr, 100 pphm O3 conc.



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Where to Buy

Supplier

KMI Group, Inc.

Kenton, Kenton USA

Telephone: 731-749-8700

Web: <http://www.kmigroup.com>

Distributor

Please contact the supplier to find a distributor for Elastoprene 65A-1000

