

Topolymer® 9310-503B

Thermoplastic Vulcanizate

Product Description

Topolymer® 9310-503B is a heat-stabilized PP/EPDM based Thermoplastic Vulcanizate (TPV) in the family of Thermoplastic Elastomer (TPE). This material is designed for a wide range of applications such as automotive interiors and exteriors, construction seals, gaskets, electricals, consumer products or other parts where softness and conformity are needed. This grade can be processed on conventional thermoplastics processing equipments for Injection Molding, Extrusion and Blow Molding or other hot melt processes. It is completely recyclable.

General

Appearance
√ Black Color

Feature $\sqrt{\text{Non-hygroscopic}}$ $\sqrt{\text{Low VOC}}$ $\sqrt{\text{Easy Processing}}$

√ High Resilience √ Enhanced UV resistance √ Smooth Surface

Compliance √ RoHS √ REACH

Form √ Pellet
Packaging √ 25kg/bag

Technical Property

Typical Properties	Typical Value	Unit	Test Method
Hardness	50	Shore D	ASTM D2240
Density	0.93	g/cm3	ASTM D792
Tensile Strength at break	21.9	MPa	ASTM D412
Tensile Strength at 100%	11.9	MPa	ASTM D412
Elongation at Break	580	%	ASTM D412
Tear Strength - Across Flow	85	KN/m	ASTM D624
Compression Set 70°Cx22h	60	%	ASTM D395B
Brittleness Temperature	-40	$^{\circ}\!\mathbb{C}$	ASTM D746
Change in Tensile Strength In Air 150°Cx168h	-8	%	ASTM D573
Change in Ultimate Elongation In Air 150°Cx168h	-13	%	ASTM D573
Change in Durometer Hardness in Air 150°Cx168h	+3	Shore D	ASTM D2240

The data are not to be defined as specifications

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Product Data Sheet

Processing Information

Injection	Typical Value	
Suggested Max Moisture	0.08%	
Suggested Max Regrind	20%	
Rear Temperature	175-190℃	
Middle Temperature	180-195℃	
Front Temperature	185-200°C	
Nozzle Temperature	185-210℃	
Mold Temperature	25-55℃	
Injection Rate	Fast	
Back Pressure	0.35-0.7MPa	
Screw Speed	100-200rpm	
Clamp Tonnage	40-70MPa	
Screw L/D Ratio	16:1-24:1	
Screw Compression Ratio	2:1-4:1	
Extrusion	Typical Value	
Melt Temperature	175-215℃	
Die Temperature	175-215℃	

Notes:

- 1) Topolymer® TPV is incompatible with PVC, Purge thoroughly before and after use of this product with a low flow (0.5 2.5 MFR) Polyethylene (PE) or Polypropylene (PP).
- 2) Drying is not required. However, if moisture is a problem or to get better appearance, dry pellets for 3 hours at 80°C

Contact Information

Top Polymer (China) tpe@topolymer.com www.topolymer.com

10 Xiyuan Rd, Tianmuhu Industrial Park Liyang, Jiangsu China

Tel: +86 (519) 8796 6118 Fax: +86 (519) 8796 6228 1017 Building 1, No. 1 Junma Street, Chigang Humen Town, Dongguan City, GuangDong China

Tel: +86 (769) 8584 6000 Fax: +86 (769) 8584 6001

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