

Topolymer® 9510-503N

Thermoplastic Vulcanizate

Product Description

Topolymer® 9510-503N 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 √ Natural Color

Feature

√ Non-hygroscopic
√ Low VOC
√ Easy Processing
√ High Resilience
√ Easy Coloring
√ Smooth Surface

√ Weather Resistance

Compliance $\sqrt{\text{RoHS}}$ $\sqrt{\text{REACH}}$

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	°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℃
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:

- 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) Color concentrate with PP or PE based carriers are recommended for coloring
- 3) 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

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