

Topolymer® ECO 9321-403N

Thermoplastic Vulcanizate

Product Description

Topolymer® ECO 9230-403N 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, covers, consumer products or other parts where softness and conformity are needed. This grade bio-content is 25%. This grade can be processed on conventional thermoplastics processing equipment for Injection Molding, Extrusion and Blow Molding or other hot melt processes. It is completely recyclable.

General

Appearance √ Natural Color

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

 \checkmark High Resilience \checkmark Easy Coloring \checkmark Smooth Surface

√ Weather Resistance √ Easy Processing

Compliance \sqrt{RoHS} \sqrt{REACH}

Form √ Pellet
Packaging √ 25kg/bag

Technical Property

Typical Properties	Typical Value	Unit	Test Method
Hardness	40	Shore D	ASTM D2240
Density	0.94	g/cm3	ASTM D792
Tensile Strength at break	17.0	MPa	ASTM D412
Tensile Strength at 100%	7.5	MPa	ASTM D412
Elongation at Break	580	%	ASTM D412
Tear Strength - Across Flow	75	KN/m	ASTM D624
Compression Set 70°Cx22h	/	%	ASTM D395B
Brittleness Temperature	-55	$^{\circ}$ C	ASTM D746
Change in Tensile Strength In Air 150°Cx168h	-10	%	ASTM D573
Change in Ultimate Elongation In Air 150°Cx168h	-8	%	ASTM D573
Change in Durometer Hardness in Air 150°Cx168h	+2	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°C	

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) 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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Rev.2024-01-01