



# Topolymer<sup>®</sup> ECO 9321-503N

## Thermoplastic Vulcanizate

### Product Description

Topolymer<sup>®</sup> ECO 9230-503N 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, covers, consumer products or other parts where softness and conformity are needed. This grade bio-content is 35%. 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	✓ Low Gravity	✓ Non-hygrosopic	✓ Low VOC
	✓ High Resilience	✓ Easy Coloring	✓ Smooth Surface
	✓ Weather Resistance	✓ Easy Processing	
Compliance	✓ RoHS	✓ REACH	
Form	✓ Pellet		
Packaging	✓ 25kg/bag		

### Technical Property

Typical Properties	Typical Value	Unit	Test Method
Hardness	50	Shore D	ASTM D2240
Density	0.94	g/cm <sup>3</sup>	ASTM D792
Tensile Strength at break	23.5	MPa	ASTM D412
Tensile Strength at 100%	12	MPa	ASTM D412
Elongation at Break	700	%	ASTM D412
Tear Strength - Across Flow	95	KN/m	ASTM D624
Compression Set 70°Cx22h	/	%	ASTM D395B
Brittleness Temperature	-50	°C	ASTM D746
Change in Tensile Strength In Air 150°Cx168h	-10	%	ASTM D573
Change in Ultimate Elongation In Air 150°Cx168h	-10	%	ASTM D573
Change in Durometer Hardness in Air 150°Cx168h	+1	Shore D	ASTM D2240

The data are not to be defined as specifications

## Processing Information

Injection	Typical Value
Suggested Max Moisture	0.08%
Suggested Max Regrind	20%
Rear Temperature	175-190°C
Middle Temperature	180-195°C
Front Temperature	185-200°C
Nozzle Temperature	185-210°C
Mold Temperature	25-55°C
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°C
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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