

SANTOPRENE™ 121-80B230 - TPV

Product Description

A soft, black thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material is specially formulated to bond to sulfur or peroxide-cured thermoset EPDM rubber for corner molding, end caps and special fixation applications, and for COF enhancement. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Specially formulated to replace thermoset EPDM rubber in automotive glass run channel corner molding applications
- Designed for shorter processing time compared to thermoset EPDM rubber
- Adheres to vulcanized EPDM rubber over wide range of temperatures
- Adheres to TPV over wide range of temperatures
- Enhanced COF properties

Characteristics

Applications	Automotive - Weather Seals
Uses	Automotive applications, Automotive exterior trim, Outdoor applications
Color	Black
Delivery Form	Pellets
Processing	Injection molding, Multi injection molding

Physical properties	Value	Unit	Test Standard
Density	57.4	lb/ft ³	ASTM D792
Density	57.4	lb/ft ³	ISO 1183
Hardness	Value	Unit	
Shore A hardness-TPE, 15s	80		ISO 868
Mechanical properties	Value	Unit	Test Standard
Tensile stress at 100%, perpendicular	479	psi	ASTM D412
Tensile stress at 100%, perpendicular	479	psi	ISO 37
Tensile strength at break elast, perpendicular	1200	psi	ASTM D412
Tensile stress at break, perpendicular	1200	psi	ISO 37
Elongation at break elast, perpendicular	540	%	ASTM D412
Tensile strain at break, perpendicular	540	%	ISO 37
Compression set, 70 °C, 22h, Type 1, Method B	50	%	ASTM D395
Compression set, 70 °C, 22h, Type A	50	%	ISO 815

Other text information

Processing Notes

Desiccant drying for 3 hours at 65°C (150°F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230°C (350 to 450°F) and is incompatible with acetal and PVC.

Other Approvals

OEM	Specification
Hyundai	MS220-13, Type C-1