

SANTOPRENE™ 121-55W241 - TPV

Product Description

A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in difficult injection molding applications. 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

- Used in glass encapsulation applications
- Used in sealing applications
- Recommended for applications requiring superior part surface appearance
- Designed to be injected at lower molding temperatures or at lower injection pressures

Characteristics

Applications	Automotive - Glass Encapsulation, 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	59		ISO 868
Mechanical properties	Value	Unit	Test Standard
Tensile stress at 100%, perpendicular	290	psi	ASTM D412
Tensile stress at 100%, perpendicular	290	psi	ISO 37
Tensile strength at break elast, perpendicular	696	psi	ASTM D412
Tensile stress at break, perpendicular	696	psi	ISO 37
Elongation at break elast, perpendicular	480	%	ASTM D412
Tensile strain at break, perpendicular	480	%	ISO 37
Compression set, 23 °C, 70h, Type 1, Method B	29	%	ASTM D395
Compression set, 23 °C, 70h, Type A	29	%	ISO 815
Compression set, 125 °C, 70h, Type 1, Method B	56	%	ASTM D395
Compression set, 125 °C, 70h, Type A	56	%	ISO 815
Thermal properties	Value	Unit	Test Standard
Brittleness temperature	-63	°C	ASTM D746

Other text information

Processing Notes

Desiccant drying for 3 hours at 80 °C (180 °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.

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Other Approvals

OEM	Specification
Hyundai	MS220-05, Type J