

SANTOPRENE® 121-87

SANTOPRENE®

A hard, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in a wide range of applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding, extrusion, blow molding, thermoforming or vacuum forming. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- · Recommended for applications requiring excellent flex fatigue resistance
- Excellent ozone resistance
- Designed for improved UV resistance

Product information

Resin Identification Part Marking Code	TPV >TPV<		ISO 1043 ISO 11469
Typical mechanical properties			
Tensile stress at 100% elongation, perpendicular Stress at break, perpendicular Elongation at break, perpendicular Brittleness Temperature Shore A hardness, 15s Compression set, 23°C, 24h Compression set, 125°C, 70h		°C %	ISO 527-1/-2 or ISO 37 ISO 527-1/-2 or ISO 37 ISO 527-1/-2 or ISO 37 ASTM D 746 ISO 48-4 / ISO 868 ISO 815 ISO 815
Specific Application Suitability			
Continuous Upper Temperature Resistance, 1000h	135	°C	SAE J2236
Electrical properties			
Relative permittivity, 60Hz Electric Strength, Short Time, 2mm	2.7 26	kV/mm	IEC 62631-2-1 ASTM D 149
Physical/Other properties			
Density	970	kg/m³	ISO 1183
Injection			
Drying Temperature Drying Time, Dehumidified Dryer		°C h	
Processing Moisture Content	≤0.08		
Max. regrind level	20		
Min. mould temperature		°C	
Max. mould temperature		°C	
Back pressure	0.517	MPa	

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Extrusion

Drying Temperature 82 °C
Drying Time, Dehumidified Dryer 3 h
Melt Temperature Range 204 °C

Additional information

Processing Notes

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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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