

# SANTOPRENE® 111-35

A soft, black, versatile 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 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**

- Recommended for applications requiring excellent flex fatigue resistance
- UL listed: file #QMFZ2.E80017, Plastics Component; file #QMFZ8.E80017, Plastics Certified For Canada -Component
- Excellent ozone resistance
- · Designed for applications requiring high-flow materials

## Typical mechanical properties

Stress at 100% elongation	1	MPa	ISO 527-1/-2 or ISO 37
Stress at break	2.9	MPa	ISO 527-1/-2 or ISO 37
Elongation at break	330	%	ISO 527-1/-2 or ISO 37
Shear Modulus	0.888	MPa	ISO 6721
Brittleness Temperature	-63	°C	ASTM D 746
Low temperature brittleness	-63	°C	ISO 812
Shore A hardness, 15s	38		ISO 48-4 / ISO 868
Shore A hardness change, after ageing	-1		ISO 48-4 / ISO 868
Compression set at 23°C, 24h	10	%	ISO 815
Compression Set, 125°C, 70h	31	%	ISO 815

## Flammability

Burning Behav. at thickness h	HB class	UL 94
Thickness tested	1.5 mm	UL 94
UL recognition	ves	UL 94

#### Other properties

Density	930 kg/m <sup>3</sup>	ISO 1183

## Injection

Drying Temperature	82	°C	
Drying Time, Dehumidified Dryer	3	h	
Processing Moisture Content	0.08	%	
Max. regrind level	20	%	
Melt Temperature Optimum	215	°C	Internal
Max. mould temperature	10 - 52	°C	
Vent depth	25	μm	
Back pressure	0.345 - 0.689	MPa	
Injection speed	fast		

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### **Processing Texts**

**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.

#### Other Approvals

Other Approvals

OEM	Specification
Stellantis - Chrysler	MS-AR-100 AMN
Ford	WSD-M2D378-A4
GM	GMW15813, Type 2
Mercedes-Benz Group (Daimler)	DBL 5562
VW Group	VW50123

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