

# SANTOPRENE<sup>®</sup> 121-80

## **SANTOPRENE®**

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 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**

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

## Product information

TPV	ISO 1043
>TPV<	ISO 11469
4.6 MPa	ISO 37
11 MPa	ISO 527-1/-2 or ISO 37
560 %	ISO 527-1/-2 or ISO 37
-59 °C	ASTM D 746
85	ISO 48-4 / ISO 868
25 %	ISO 815
52 %	ISO 815
90 °C	UL 746B
90 °C	UL 746B
90 °C	UL 746B
95 °C	UL 746B
135 °C	SAE J2236
f3	UL 749
f4	UL 2157
f1	UL 746C
HB class	IEC 60695-11-10
1.5 mm	IEC 60695-11-10
yes	UL 94
HB class	IEC 60695-11-10
1 mm	IEC 60695-11-10
yes	UL 94
23.1 mm/min	ISO 3795 (FMVSS 302)
	>TPV< 4.6 MPa 11 MPa 560 % -59 °C 85 25 % 52 % 90 °C 90 °C 90 °C 90 °C 90 °C 90 °C 95 °C 135 °C 135 °C 135 °C 135 °C 13 f4 f1 HB class 1.5 mm yes HB class 1 mm yes

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Hot Wire Ignition, 1.5mm Hot Wire Ignition, 3mm	PLC 3 PLC 2		UL 746A UL 746A
Electrical properties			
Relative permittivity, 60Hz Arc Resistance Performance Level Category Electric Strength, Short Time, 2mm High Amperage Arc Ignition Category, 1.5 mm	2.6 PLC 6 28 PLC 0	kV/mm	IEC 62631-2-1 UL 746B ASTM D 149 UL 746A
Physical/Other properties			
Density	970	kg/m³	ISO 1183
Injection			
Max. regrind level Back pressure	20 0.517		
Extrusion			
Drying Temperature Drying Time, Dehumidified Dryer Melt Temperature Range	-	°C h °C	

### Additional information

**Processing Notes** 

#### **Processing Notes**

Desiccant drying for 3 hours at  $80 \degree C$  ( $180 \degree F$ ) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to  $230 \degree C$  (350 to  $450 \degree F$ ) and is incompatible with acetal and PVC.

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Page: 2 of 2

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