

# SANTOPRENE<sup>®</sup> 111-35

### **SANTOPRENE®**

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

Product information				
Resin Identification		TPV		ISO 1043
Part Marking Code		>TPV<		ISO 11469
Typical mechanical properties				
Tensile stress at 100% elongation, pe	rpendicular	1	MPa	ISO 37
Stress at break, perpendicular		2.9	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular		330	%	ISO 527-1/-2 or ISO 37
Brittleness Temperature		-63	°C	ASTM D 746
Shore A hardness, 15s		38		ISO 48-4 / ISO 868
Compression set, 23°C, 24h		10		ISO 815
Compression set, 125°C, 70h		31	%	ISO 815
Flammability				
Burning Behav. at 1.5mm nom. thickn		HB	class	IEC 60695-11-10
Thickness tested		1.5	mm	IEC 60695-11-10
UL recognition		yes		UL 94
Burning rate, Thickness 2 mm		45.9	mm/min	ISO 3795 (FMVSS 302)
Physical/Other properties				
Density		930	kg/m³	ISO 1183
Injection				
Max. regrind level		20	%	
Back pressure		0.517		
Ejection temperature			°C	
Additional information				
Processing Notes	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.

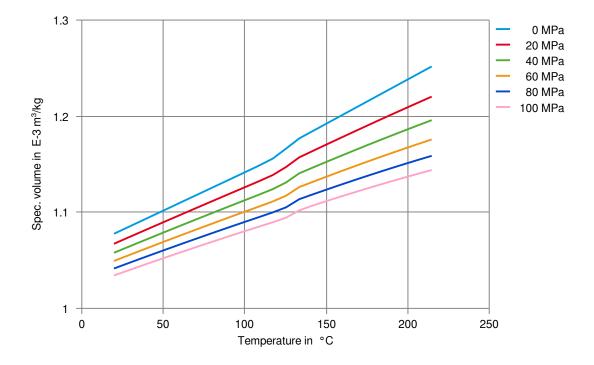
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Specific volume-temperature (pvT)



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