

Santoprene™ 251-80W232

Thermoplastic Vulcanizate

ExxonMobil Chemical

Message:

It is a soft, colorable, flame-retardant thermoplastic vulcanized elastomer (TPV) in the thermoplastic elastomer (TPE) series. This material has good fluid resistance, contains non-ether brominated flame retardants, and does not contain metal deactivator. This brand of Shanduping TPV is a shear rate dependent product that can be processed on conventional thermoplastic injection molding, extrusion molding, blow molding, thermoforming or vacuum forming equipment. This is a polyolefin-based material that can be recycled in the production process.

General Information	
UL YellowCard	E80017-250535
Features	Good dimensional stability
	Low compressive deformability
	Flexibility at low temperatures
	Recyclable materials
	Good electrical performance
	Good heat aging resistance
	Good coloring
	Ozone resistance
	Good chemical resistance
	Fatigue resistance
	Flame retardancy
Uses	Cable sheath
	Wire and cable applications
	Application in Automobile Field
	cord sheath
Agency Ratings	UL QMFZ2
	UL QMFZ8
	UL QMTT2
RoHS Compliance	RoHS compliance
UL File Number	E86313
	E80017
Appearance	Natural color
Forms	Particle
Processing Method	Blow molding
	Multiple injection molding
	Co-extrusion molding

Extrusion

Extrusion blow molding

Sheet extrusion molding

Thermoforming

Profile extrusion molding

Vacuum forming

Injection blowing molding

Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm ³	ASTM D792, ISO 1183
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shaw A, 15 seconds, 23°C, 2.00mm)	86		ISO 868
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress - Across Flow (100% Strain, 23°C)	3.90	MPa	ASTM D412, ISO 37
Tensile Strength - Across Flow (Break, 23°C)	9.00	MPa	ASTM D412, ISO 37
Tensile Elongation - Across Flow (Break, 23°C)	550	%	ASTM D412, ISO 37
Compression Set			
23°C, 168 hr ¹	31	%	ASTM D395B
70°C, 22 hr ²	40	%	ASTM D395B
100°C, 168 hr ³	55	%	ASTM D395B
23°C, 168 hr ⁴	31	%	ISO 815
70°C, 22 hr ⁵	40	%	ISO 815
100°C, 168 hr ⁶	55	%	ISO 815
Thermal	Nominal Value	Unit	Test Method
RTI Elec	90.0	°C	UL 746
RTI			UL 746
1.50 mm	85.0	°C	UL 746
3.00 mm	90.0	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength (23°C, 2.00 mm)	28	kV/mm	ASTM D149
Comparative Tracking Index (CTI)	PLC 0		UL 746
High Amp Arc Ignition (HAI)	PLC 0		UL 746
High Voltage Arc Resistance to Ignition (HVAR)	PLC 6		UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 2		UL 746
Hot-wire Ignition (HWI)	PLC 3		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.50 mm	V-0		UL 94

3.00 mm	V-0	UL 94
Oxygen Index	27	%
ASTM D2863, ISO 4589-2		

Additional Information

如果适用,这是基于扇形浇口注塑成型的平板测试结果.拉伸强度,伸长率和拉伸应力沿垂直流动方向测定 - ISO 1 型,ASTM die C.25% 形变时的永久压缩变形.从埃克森美孚欧洲分支机构直接购买的所有产品都符合 REACH 法规. 对于埃克森美孚未进口至欧洲的产品,用户应自行评估其是否满足 REACH 法规.

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Injection	Nominal Value	Unit
Drying Temperature	82.2	°C
Drying Time	3.0	hr
Suggested Max Moisture	0.080	%
Suggested Max Regrind	20	%
Mold Temperature	10.0 - 51.7	°C
Injection Rate	Fast	
Back Pressure	0.345 - 0.689	MPa
Screw Speed	100 - 200	rpm
Clamp Tonnage	4.1 - 6.9	kN/cm²
Cushion	3.18 - 6.35	mm
Screw L/D Ratio	16.0:1.0 to 20.0:1.0	
Screw Compression Ratio	2.0:1.0 to 2.5:1.0	
Vent Depth	0.025	mm

Injection instructions

Santoprene TPV与乙缩醛和PVC不相容.更多关于加工和模具设计的信息,请查阅我们的《注射成型指南》.

Extrusion	Nominal Value	Unit
Drying Temperature	82.2	°C
Drying Time	3.0	hr

Extrusion instructions

Santoprene TPV与乙缩醛和PVC不相容.更多关于加工和模具设计的信息,请查阅我们的《挤出成型指南》.

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