

ExxonMobil Santoprene® 251-80W232 Thermoplastic Elastomer

Category : Polymer , Thermoplastic , Elastomer, TPE , Thermoplastic Vulcanizate Elastomer (TPV)

Material Notes:

A soft, colorable, flame retardant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material has good fluid resistance and contains non-ether brominated flame retardants (non-furan emitting). It does not contain added antioxidants or metal deactivators. This grade of Santoprene TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding, extrusion or blow molding. It is polyolefin based and completely recyclable. 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. Recommended for applications requiring excellent ozone resistance. EU and China RoHS compliant. Applications: Automotive – Flame Retardant Connectors and Seals Electrical – Flame Retardant Connectors and seals; Flame Retardant Wire and Cable Jacket Uses: Automotive Applications Cable Jacketing Flexible Cord Jacketing Wire & Cable Applications Availability: Africa & Middle East, Europe, North America, Asia Pacific, Latin America and South America Information provided by ExxonMobil Chemical

Order this product through the following link:

http://www.lookpolymers.com/polymer_ExxonMobil-Santoprene-251-80W232-Thermoplastic-Elastomer.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.24 g/cc	1.24 g/cc	23°C; ASTM D792

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	86	86	2 mm, 15 sec; ISO 868
Tensile Strength at Break	9.03 MPa	1310 psi	Across Flow; ASTM D412
Tensile Stress	3.90 MPa @Strain 100 %	566 psi @Strain 100 %	Across Flow; ASTM D412
Elongation at Break	550 %	550 %	Across Flow; ASTM D412
Compression Set	31 %	31 %	73°F, 168 hr; ASTM D395
	55 %	55 %	212°F, 168 hr; ASTM D395
	40 % @Temperature 70.0 °C, Time 79200 sec	40 % @Temperature 158 °F, Time 22.0 hour	ASTM D395

Thermal Properties	Metric	English	Comments
UL RTI, Electrical	27.6 °C	81.7 °F	UL 746
UL RTI, Mechanical with Impact	85.0 °C @Thickness 1.50 mm	185 °F @Thickness 0.0591 in	UL 746
	90.0 °C	194 °F	

Thermal Properties	Metric	English	Comments
Flammability, UL94	V-0	V-0	UL 746
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	V-0	V-0	
	@Thickness 3.00 mm	@Thickness 0.118 in	
Oxygen Index	27 %	27 %	ASTM D2863

Electrical Properties	Metric	English	Comments
Dielectric Strength	700 kV/mm	17800 kV/in	ASTM D149
	@Thickness 2.03 mm	@Thickness 0.0799 in	

Processing Properties	Metric	English	Comments
Processing Temperature	175 - 230 °C	347 - 446 °F	
Mold Temperature	10.0 - 51.7 °C	50.0 - 125 °F	
Drying Temperature	82.2 °C	180 °F	
Dry Time	3 hour	3 hour	
Moisture Content	0.080 %	0.080 %	
Back Pressure	0.345 - 0.689 MPa	50.0 - 100 psi	
Clamp Pressure	41.4 - 68.9 MPa	6000 - 10000 psi	
Vent Depth	0.00254 cm	0.00100 in	
Cushion	0.317 - 0.635 cm	0.125 - 0.250 in	
Screw Speed	100 - 200 rpm	100 - 200 rpm	

Descriptive Properties	Value	Comments
Change in Mass in IRM 903 Oil at 257°F for 70 hr	41	
Color	Natural Color	
Form	Pellets	
Injection Rate	Fast	
Maximum Regrind %	20	
Screw Compression Ratio	2:1 - 2.5:1	

Screw L/D Ratio Descriptive Properties	16:1 - 20:1 Value	Comments
---	----------------------	----------

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China