

## ExxonMobil Santoprene® 101-64 Thermoplastic Elastomer

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

### Material Notes:

**Product Description:** 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 applications. 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. Although not NSF certified, this product has a Material Supplier Form on file with NSF to facilitate its evaluation for use in applications requiring NSF certification. Recommended for applications requiring excellent flex fatigue resistance. Excellent ozone resistance. EU and China RoHS compliant. **Applications:** Automotive-Air Induction System Ducts, Boots and Bellows for Steering and Suspension, Plugs, Bumpers, Grommets, Clips, Seals, Gaskets and Weather Seals Consumer-Electronic and Floor Care Industrial – Seals and Gaskets Tubing **Uses:** Appliance Components Consumer Applications Gaskets Automotive Applications Diaphragms Seals Automotive Under the Hood Electrical Parts Tubing **Availability:** Africa & Middle East, Europe, North America, Asia Pacific, Latin America and South America Information provided by Advanced Elastomer Systems

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ExxonMobil-Santoprene-101-64-Thermoplastic-Elastomer.php](http://www.lookpolymers.com/polymer_ExxonMobil-Santoprene-101-64-Thermoplastic-Elastomer.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.970 g/cc	0.970 g/cc	23°C; ASTM D792

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	69	69	2 mm. 15 sec; ASTM D2240
	71	71	Air at 302°F, 168 hr; ASTM D573
Tensile Strength at Break	6.189 MPa	897.6 psi	Air at 302°F, 168 hr; ASTM D573
	7.03 MPa	1020 psi	Across Flow; ASTM D412
Tensile Stress	2.60 MPa	377 psi	Across Flow; ASTM D412
	@Strain 100 %	@Strain 100 %	
Elongation at Break	450 %	450 %	Across Flow; ASTM D412
	477 %	477 %	Air at 302°F, 168 hr; ASTM D573
Tear Strength	23.0 kN/m	131 pli	73°C, Die C, Across Flow; ASTM D624
Compression Set	18 %	18 %	158°F, 22 hr, Type 1; ASTM D395
	44 %	44 %	257°F, 70 hr, Type 1; ASTM D395

Thermal Properties	Metric	English	Comments
--------------------	--------	---------	----------

Thermal Properties	Metric	English	Comments
Brittleness Temperature	-60.0 °C	-76.0 °F	ASTM D746
UL RTI, Electrical	90.0 °C	194 °F	UL 746
UL RTI, Mechanical with Impact	90.0 °C	194 °F	UL 746
	@Thickness 25.4 mm	@Thickness 1.00 in	
	90.0 °C	194 °F	UL 746
	@Thickness 38.1 mm	@Thickness 1.50 in	
	95.0 °C	203 °F	UL 746
	@Thickness 76.2 mm	@Thickness 3.00 in	
Flammability, UL94	HB	HB	
	@Thickness 1.00 mm	@Thickness 0.0394 in	
	HB	HB	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	
	@Thickness 3.00 mm	@Thickness 0.118 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	5.00e+15 ohm-cm	5.00e+15 ohm-cm	3.30 mm; ASTM D257
	1.00e+16 ohm-cm	1.00e+16 ohm-cm	
Dielectric Constant	2.5	2.5	1.98 mm; ASTM D150
Dielectric Strength	26.8 kV/mm	680 kV/in	2.03 mm; ASTM D149

Processing Properties	Metric	English	Comments
Processing Temperature	175 - 230 °C	347 - 446 °F	
Rear Barrel Temperature	177 °C	350 °F	
Middle Barrel Temperature	182 °C	360 °F	
Front Barrel Temperature	182 °C	360 °F	
Nozzle Temperature	188 - 221 °C	370 - 430 °F	
Die Temperature	199 °C	390 °F	Extrusion
Melt Temperature	>= 196 °C	>= 385 °F	Extrusion

Processing Properties	193 - 232 °C Metric	380 - 450 °F English	Processing Comments
Mold Temperature	10.0 - 51.7 °C	50.0 - 125 °F	Processing
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	Processing
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
Color	Black	
Form	Pellets	
Injection Rate	Fast	
Maximum Regrind %	20	
Screw Compression Ratio	2:1 - 2.5:1	
Screw L/D Ratio	16:1 - 20:1	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China