

## ExxonMobil Santoprene® 243-40 Thermoplastic Elastomer (discontinued \*\*)

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

### Material Notes:

A hard, colorable, specialty thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. It complies with NSF 61 for plumbing applications in contact with potable water and NSF 51 for food processing equipment. 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. Complies with NSF Standard 51: Listed Plastic Materials and Components used in Food Equipment. Complies with NSF Standard 61: Piping System Components for Drinking Water. Recommended for applications requiring excellent flex fatigue resistance. Information provided by Advanced Elastomer Systems

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ExxonMobil-Santoprene-243-40-Thermoplastic-Elastomer-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_ExxonMobil-Santoprene-243-40-Thermoplastic-Elastomer-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.950 g/cc	0.950 g/cc	23°C; ASTM D792

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	39	39	.12 in; ASTM D2240
Tensile Strength at Break	21.9 MPa	3180 psi	Across Flow; ASTM D412
Tensile Strength, Ultimate	8.62 MPa	1250 psi	Across Flow; ASTM D412
Elongation at Break	680 %	680 %	Across Flow; ASTM D412

Processing Properties	Metric	English	Comments
Processing Temperature	175 - 230 °C	347 - 446 °F	
Rear Barrel Temperature	193 °C	380 °F	
Middle Barrel Temperature	199 °C	390 °F	
Front Barrel Temperature	204 °C	400 °F	
Nozzle Temperature	210 - 238 °C	410 - 460 °F	
Die Temperature	216 °C	420 °F	Extrusion
Melt Temperature	210 °C	410 °F	Extrusion
	216 - 232 °C	420 - 450 °F	Processing
Mold Temperature	10.0 - 51.7 °C	50.0 - 125 °F	Processing
Drying Temperature	82.2 °C	180 °F	

Dry Time Processing Properties	3 hour Metric	3 hour English	Comments
Moisture Content	0.080 %	0.080 %	
Back Pressure	0.345 - 0.689 MPa	50.0 - 100 psi	Processing
	5.00 - 20.0 MPa	725 - 2900 psi	Extrusion
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	72	
Color	Natural Color	
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.

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