

## ExxonMobil Santoprene® 111-55 Thermoplastic Elastomer (discontinued \*\*)

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

### Material Notes:

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 completely recyclable. Information provided by Advanced Elastomer Systems

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ExxonMobil-Santoprene-111-55-Thermoplastic-Elastomer-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_ExxonMobil-Santoprene-111-55-Thermoplastic-Elastomer-nbspdiscontinued-.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	55	55	.12 in; ASTM D2240
	58	58	Air at 302°F, 168 hr; ASTM D573
Tensile Strength at Break	2.587 MPa	375.2 psi	257°F, 70 hr in IRM 903 Oil; ASTM D471
	4.065 MPa	589.6 psi	Air at 302°F, 168 hr; ASTM D573
	4.62 MPa	670 psi	Across Flow; ASTM D412
Tensile Strength, Ultimate	1.86 MPa	270 psi	Across Flow; ASTM D412
Elongation at Break	164 %	164 %	257°F, 70 hr in IRM 903 Oil; ASTM D471
	400 %	400 %	Across Flow; ASTM D412
	464 %	464 %	Air at 302°F, 168 hr; ASTM D573
Compression Set	12 %	12 %	73°F, 22 hr; ASTM D395
	34 %	34 %	257°F, 70 hr; ASTM D395

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	135 °C	275 °F	
Brittleness Temperature	-60.0 °C	-76.0 °F	ASTM D746

Electrical Properties	Metric	English	Comments
Dielectric Constant	2.6	2.6	ASTM D150

Electrical Properties	Metric //mm	English in	Comments
<b>Processing Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Processing Temperature	175 - 230 °C	347 - 446 °F	
Rear Barrel Temperature	177 - 193 °C	350 - 380 °F	
Middle Barrel Temperature	179 - 199 °C	355 - 390 °F	
Front Barrel Temperature	179 - 204 °C	355 - 400 °F	
Nozzle Temperature	191 - 229 °C	375 - 445 °F	
Melt Temperature	193 - 241 °C	380 - 465 °F	Processing
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.

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