

## ExxonMobil Santoprene® 221-55 Thermoplastic Elastomer (discontinued \*\*)

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

### Material Notes:

A soft, colorable, UV resistant 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 or extrusion. It is polyolefin based and completely recyclable. Recommended for applications requiring excellent flex fatigue resistance. Excellent ozone resistance. Designed for improved UV resistance. Compliant to EU Directive 2003/11/EC regarding marketing and use of certain dangerous substances and preparations, specifically pentabromodiphenyl ether or octabromodiphenyl ether. Information provided by Advanced Elastomer Systems

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ExxonMobil-Santoprene-221-55-Thermoplastic-Elastomer-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_ExxonMobil-Santoprene-221-55-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
	56	56	Air at 302°F, 168 hr; ASTM D573
Tensile Strength at Break	5.38 MPa	780 psi	Across Flow; ASTM D412
	5.754 MPa	834.6 psi	Air at 302°F, 168 hr; ASTM D573
Tensile Strength, Ultimate	2.00 MPa	290 psi	Across Flow; ASTM D412
	440 %	440 %	Across Flow; ASTM D412
Elongation at Break	440 %	440 %	Across Flow; ASTM D412
	501.6 %	501.6 %	Air at 302°F, 168 hr; ASTM D573
Tear Strength	17.0 kN/m	97.0 pli	73°F, Die C; ASTM D624
Compression Set	16 %	16 %	73°F, 22 hr; ASTM D395
	41 %	41 %	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	2.4	2.4	ASTM D150

Electrical Properties	Metric	English	Comments
-----------------------	--------	---------	----------

Processing Properties	Metric	English	Comments
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	
Die Temperature	199 °C	390 °F	Extrusion
Melt Temperature	196 °C	385 °F	Extrusion
	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
	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
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.**

**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**