

ExxonMobil Santoprene® 211-80 Thermoplastic Elastomer (discontinued **)

Categories: [Polymer](#); [Thermoplastic](#); [Elastomer, TPE](#); [Thermoplastic Vulcanizate Elastomer \(TPV\)](#)

Material Notes: A soft, colorable, 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.

- 1 Recommended for applications requiring excellent flex fatigue resistance.
- 1 Recommended for applications requiring excellent ozone resistance.
- 1 Designed for applications requiring high-flow materials.
- 1 Recommended for applications requiring superior part surface appearance.

Information provided by Advanced Elastomer Systems

Key Words: EU 2003/11/EC; RoHS Compliant; UL QMFZ2; UL QMFZ8

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

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 A	80	80	.12 in; ASTM D2240
Tensile Strength at Break	9.38 MPa	1360 psi	Across Flow; ASTM D412
Tensile Strength, Ultimate	4.21 MPa	610 psi	Across Flow; ASTM D412
Elongation at Break	450 %	450 %	Across Flow; ASTM D412

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	
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	
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

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Materials flagged as discontinued (D) are no longer part of the manufacturer's standard product line according to our latest information. These materials may be available by special order, in distribution inventory, or reinstated as an active product. Data sheets from materials that are no longer available remain in MatWeb to assist users in finding replacement materials.

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