

Advanced Elastomer Systems Santoprene® 221-73 W175 Thermoplastic Rubber (discontinued **)

Category : Polymer , Thermoplastic , Elastomer, TPE , Thermoplastic Elastomer, Melt-Processible Rubber

Material Notes:

A colorable thermoplastic UV grade elastomer designed for thin wall extrusion applications with good fluid resistance, formulated to replace thermoset elastomers such as EPDM, polychloroprene, and chlorosulfonated polyethylene. It can be processed using extrusion or other melt processing techniques. Key Features: Dielectric constant 2.3, dielectric strength at 3.17 mm (125 mil), 19.6 kV/mm (500 v/mil); Continuous temperature rating 1000 hrs. @ 135°C (275°F); Excellent flex fatigue resistance; Excellent ozone resistance; Excellent mechanical properties retention after UV exposure; Extrudes thin sections with excellent definition (down to 0.33 mm [1.3"] radius). Long runs with minimal build-up of material on screen packs or narrow die sections. Additional processing comments: This thermoplastic rubber is a shear-dependent material that can be processed on conventional thermoplastic equipment for injection molding, extrusion, or blow molding. For extrusion, a general purpose screw with a compression ratio of 2.5 to 3.0 is recommended. Material can be recycled. SANTOPRENE rubber is incompatible with acetal and PVC. Values below are for injection molded plaques, side gated, 82.6 mm x 117.5 mm x 3.0 mm. Tensile properties measured across flow. Data provided by Advanced Elastomer Systems. Advanced Elastomer Systems is now a part of ExxonMobil. This grade was removed from the Advanced Elastomers Systems standard product line before the ExxonMobil acquisition.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Advanced-Elastomer-Systems-Santoprene-221-73-W175-Thermoplastic-Rubber-nbspdiscontinued.php

Physical Properties	Metric	English	Comments
Density	0.960 g/cc	0.0347 lb/in ³	TPE-0105 (ASTM D792)

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	73	73	5 Second; TPE-0169 (ASTM D 2240)
Tensile Strength, Ultimate	8.40 MPa	1220 psi	TPE-0153 (ASTM D 412)
Elongation at Break	500 %	500 %	TPE-0153 (ASTM D 412)
100% Modulus	0.00340 GPa	0.493 ksi	TPE-0153 (ASTM D 412)
Tear Strength	28.0 kN/m	160 pli	28 kN/m at 23°C. Value at 100°C is 13 kN/m. TPE-0056 (ASTM D 624)
Compression Set	29 %	29 %	23°C, 168 hrs.; TPE-0016 (ASTM D 412)
	42 % @Temperature 100 °C	42 % @Temperature 212 °F	168 hrs.; TPE-0016 (ASTM D 412)
Tensile Set	14 %	14 %	23°C, 168 hrs.; TPE-0053 (ASTM D 412)

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	135 °C	275 °F	Continuous temperature Rating, 1000 hours
Brittleness Temperature	<= -60.0 °C	<= -76.0 °F	TPE-0089 (ASTM D 746)

Electrical Properties	Metric	English	Comments
Dielectric Constant	2.3	2.3	Frequency not specified
Dielectric Strength	19.6 kV/mm @Thickness 3.17 mm	498 kV/in @Thickness 0.125 in	

Processing Properties	Metric	English	Comments
Processing Temperature	177 - 232 °C	351 - 450 °F	
Drying Temperature	82.0 °C	180 °F	Desiccant drying for 3 hours recommended
Dry Time	3 hour	3 hour	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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