

Advanced Elastomer Systems Santoprene® 451-87 Thermoplastic Rubber (discontinued **)

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

Material Notes:

A colorable thermoplastic flame retardant wire and cable elastomer with good fluid resistance, formulated to replace thermoset elastomers such as EPDM, polychloroprene, and chlorosulfonated polyethylene. It can be processed using injection molding, extrusion, blow molding or other melt processing techniques. Key Features: UL 62 Bulletin listed; Wire and cable rating: 105°C (221°F) dry, 75°C (167°F) wet and 60°C (140°F) oil; Limiting oxygen index, 24.5% (passes VW-1, IEEE 383); EM 60 at 75°C (167°F): 1 day SIC = 2.51; % change in SIC, 1 to 14 days = 1.60; % change in SIC, 7 to 14 days = .50; Stability factor, 14 days = 0.08; IR constant @ 15.6°C (60°F) = >100,000 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-451-87-Thermoplastic-Rubber-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.24 g/cc	0.0448 lb/in ³	TPE-0105 (ASTM D792)

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	87	87	5 Second; TPE-0169 (ASTM D 2240)
Tensile Strength, Ultimate	9.20 MPa	1330 psi	TPE-0153 (ASTM D 412)
Elongation at Break	450 %	450 %	TPE-0153 (ASTM D 412)
100% Modulus	0.00470 GPa	0.682 ksi	TPE-0153 (ASTM D 412)
Tear Strength	34.9 kN/m	199 pli	34.9 kN/m at 23°C. Value at 100°C is 10.4 kN/m. TPE-0056 (ASTM D 624)
Compression Set	26 %	26 %	23°C, 168 hrs.; TPE-0016 (ASTM D 412)
Tensile Set	15 %	15 %	23°C, 168 hrs.; TPE-0053 (ASTM D 412)

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	105 °C	221 °F	Wire and Cable Rating Dry
Brittleness Temperature	<= -56.0 °C	<= -68.8 °F	TPE-0089 (ASTM D 746)

Oxygen Index Thermal Properties	24.5 % Metric	24.5 % English	Comments
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