

DSM Arnitel® PM650 General Purpose Grade Copolyester Elastomer (North America)

Category : Polymer , Thermoplastic , Elastomer, TPE , Polyester TPE , Polyester, TP

Material Notes:

Product description: Arnitel® combines the advantages of engineering thermoplastics, being easy to process with excellent mechanical properties, at the same time with the flexibility of rubbers. Arnitel does not require vulcanization. This leads to substantial reductions in part cost. Arnitel can be used over a wide range of temperatures. Arnitel has exceptional fatigue, creep resistance and resistance to oils, greases and many other chemicals. **Characteristics of Arnitel:** Excellent strength over a wide range of temperatures Excellent dynamic properties e.g. creep and fatigue High heat resistance Exceptional resistance to oils and greases Good chemical resistance High degree of versatility in processing Easy coloring using masterbatches Surface quality from high gloss to textured Excellent heat resistance (long term 165°C) Good electrical insulation properties Low moisture absorption, excellent dimensional stability Easy flow, fast cooling times

Typical Applications:

Automotive: Arnitel® is extensively used in the automotive industry for applications requiring exceptional fatigue resistance and resistance to oil and greases. Examples are: Rack and Pinion Bellows, Constant Velocity Joint Boots (CVJ Boots), Air brake tubings. Arnitel in the Electronic and Consumer Goods Industry: Arnitel® finds enormous potential and is also widely used in consumer electronic companies. Arnitel® is a good choice for low noise gears where their exceptional processability without any defects such as flash, makes it the material solution of choice. Arnitel® is also used in highly demanding applications such as in mobile phone antennas. Arnitel® has exceptional flexibility and can perform or even outperform functions that normally require conventional rubbers. Available in a wide range of hardnesses, Arnitel can replace metals, thermoplastics, leather and rubber, often with a reduction in finished part costs. Information provided by DSM.

Order this product through the following link:

http://www.lookpolymers.com/polymer_DSM-Arnitel-PM650-General-Purpose-Grade-Copolyester-Elastomer-North-America.php

Physical Properties	Metric	English	Comments
Density	1.26 g/cc	0.0455 lb/in ³	ISO 1183
Melt Flow	5.04 g/10 min @Load 2.16 kg, Temperature 230 °C	5.04 g/10 min @Load 4.76 lb, Temperature 446 °F	Calculated from Volume Flow Rate of 4 cm ³ /10 min; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	63	63	3 s; ISO 868
Tensile Strength at Break	26.8 MPa	3890 psi	ISO 527-1/-2
Tensile Strength, Yield	16.6 MPa @Strain 5.00 %	2410 psi @Strain 5.00 %	ISO 527-1/-2
	22.7 MPa @Strain 10.0 %	3290 psi @Strain 10.0 %	ISO 527-1/-2
	25.5 MPa	3700 psi	

Mechanical Properties	Metric	English	ISO 527-1/-2 Comments
	25.6 MPa	3710 psi	ISO 527-1/-2
	@Strain 50.0 %	@Strain 50.0 %	
Elongation at Break	175 %	175 %	ISO 527-1/-2
Elongation at Yield	26.3 %	26.3 %	ISO 527-1/-2
Tensile Modulus	0.520 GPa	75.4 ksi	ISO 527-1/-2
Izod Impact, Notched (ISO)	8.00 kJ/m ²	3.81 ft-lb/in ²	ISO 180/4A
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	37.0 kJ/m ²	17.6 ft-lb/in ²	ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	1.10 J/cm ²	5.24 ft-lb/in ²	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	3.70 J/cm ²	17.6 ft-lb/in ²	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
Melting Point	221 °C	430 °F	10°C/min; ISO 11357-1/-3
Flammability, UL94	HB	HB	IEC 60695-11-10
	@Thickness 1.60 mm	@Thickness 0.0630 in	

Descriptive Properties	Value	Comments
Film Extrusion	Yes	
High impact or impact modified	Yes	
Other Extrusion	Yes	
Profile extrusion	Yes	
Sheet extrusion	Yes	
Without Fillers	Yes	

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