

Arnitel® PL461

Thermoplastic Copolyester Elastomer
DSM Engineering Plastics

Message:

Arnitel® PL461 is a Thermoplastic Copolyester Elastomer (TPC-ET) material. It is available in Asia Pacific, Europe, or North America for injection molding.

General Information			
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	39.0	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.8	%	
Flow	1.6	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 3 sec)	45		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	135	MPa	ISO 527-2
Tensile Stress			ISO 527-2
Break	21.0	MPa	
5.0% Strain	6.00	MPa	
10% Strain	9.20	MPa	
50% Strain	13.2	MPa	
100% Strain	14.4	MPa	
Nominal Tensile Strain at Break	350	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength			ISO 180/1A
-30°C	No Break		
23°C	No Break		
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	65.0	°C	ISO 75-2/B
Vicat Softening Temperature	189	°C	ISO 306/A50
Melting Temperature ¹	220	°C	ISO 11357-3
Injection	Nominal Value	Unit	
Drying Temperature	110	°C	
Drying Time	4.0 to 6.0	hr	

Rear Temperature	200 to 220	°C
Middle Temperature	210 to 230	°C
Front Temperature	220 to 240	°C
Nozzle Temperature	230 to 250	°C
Processing (Melt) Temp	230 to 250	°C
Mold Temperature	20.0 to 50.0	°C
Injection Rate	Moderate-Fast	
Back Pressure	3.00 to 10.0	MPa
Screw Compression Ratio	2.5:1.0	
NOTE		

1. 10°C/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

