

## Lubrizol Advanced Materials Pearlthane® ECO D12T90 Thermoplastic Polyurethane

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Polyurethane, TP

### Material Notes:

Type : Pearlthane® ECO D12T90 is a high performance bio-based thermoplastic polyurethane. With ca. 38% bio-based content. Main

Application : Injection Moulding  
Special Features : Very good flexibility at low temperatures and very good abrasion resistance.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Lubrizol-Advanced-Materials-Pearlthane-ECO-D12T90-Thermoplastic-Polyurethane.php](http://www.lookpolymers.com/polymer_Lubrizol-Advanced-Materials-Pearlthane-ECO-D12T90-Thermoplastic-Polyurethane.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.15 g/cc	1.15 g/cc	ISO 2781

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	91	91	ISO 868
Tensile Strength	39.07 MPa	5667 psi	ISO 527-2/5A/500
Elongation at Break	470 %	470 %	ISO 527-2/5A/500
50% Modulus	0.00600 GPa	0.870 ksi	ISO 527-2/5A/500
100% Modulus	0.00900 GPa	1.31 ksi	ISO 527-2/5A/500
300% Modulus	0.0250 GPa	3.63 ksi	ISO 527-2/5A/500
Tear Strength	122 kN/m	697 pli	Die C; ISO 34-1B
Abrasion	35	35	mm <sup>3</sup> Loss; ISO 4649-A

Thermal Properties	Metric	English	Comments
Vicat Softening Point	108 Â°C	226 Â°F	ISO 306

Processing Properties	Metric	English	Comments
Feed Temperature	40.0 Â°C	104 Â°F	
Nozzle Temperature	205 - 215 Â°C	401 - 419 Â°F	
Zone 1	190 - 200 Â°C	374 - 392 Â°F	
Zone 2	195 - 205 Â°C	383 - 401 Â°F	
Zone 3	200 - 210 Â°C	392 - 410 Â°F	
Zone 4	200 - 210 Â°C	392 - 410 Â°F	

Processing Properties	3.00 hour Metric	English <sup>ur</sup>	Comments
Dry Time	@Temperature 80.0 Â°C	@Temperature 176 Â°F	

Descriptive Properties	Value	Comments
Biobased Content (%)	37	ASTM D-6866
Compression Zone Temperature	385Â°F	
Metering Zone Temperature	390Â°F	

## Contact Songhan Plastic Technology Co.,Ltd.

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