

## Lubrizol Advanced Materials PEARLTHANE® 11H94 Thermoplastic Polyurethane Elastomer

Category : Polymer , Thermoplastic , Polyurethane, TP , Thermoplastic Polyurethane (TPUR), Polyester Grade

### Material Notes:

PEARLTHANE® D11H94 is a high performance polycaprolactone copolyester based TPU, supplied in form of translucent, colorless pellets, featuring adequate hardness as well as excellent flow and mechanical properties, including an outstandingly low compression set value. Product recommended for injection molding applications with an extremely short cycle time. PEARLTHANE® D11H94 is especially recommended for injection molding applications such as: automotive parts, seals and gaskets and a variety of high performance technical parts. All information provided by Merquinsa

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Lubrizol-Advanced-Materials-PEARLTHANE-11H94-Thermoplastic-Polyurethane-Elastomer.php](http://www.lookpolymers.com/polymer_Lubrizol-Advanced-Materials-PEARLTHANE-11H94-Thermoplastic-Polyurethane-Elastomer.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.18 g/cc	1.18 g/cc	ASTM D792
Melt Flow	10 g/10 min @Load 21.6 kg	10 g/10 min @Load 47.6 lb	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	95	95	ASTM D2240
Tensile Strength, Yield	42.07 MPa	6102 psi	ASTM D412
Elongation at Break	515 %	515 %	ASTM D412
100% Modulus	0.01202 GPa	1.743 ksi	ASTM D412
300% Modulus	0.02304 GPa	3.341 ksi	ASTM D412
Tear Strength	135 kN/m	771 pli	ASTM D624 (Die C)
Abrasion	35	35	loss (mm <sup>3</sup> ); DIN 53.516
Compression Set	32 % @Temperature 70.0 °C, Time 79200 sec	32 % @Temperature 158 °F, Time 22.0 hour	ASTM D395
	37 % @Temperature 70.0 °C, Time 252000 sec	37 % @Temperature 158 °F, Time 70.0 hour	ASTM D395
	43 % @Temperature 100 °C,	43 % @Temperature 212 °F,	ASTM D395

Mechanical Properties	Time 79200 sec Metric	Time 22.0 hour English	Comments
Thermal Properties	Metric	English	Comments
Melting Point	197 - 207 Â°C	386 - 404 Â°F	MQSA 111
Glass Transition Temp, Tg	-38.9 Â°C	-38.0 Â°F	DSC, 10Â°C/min; DIN 51.007

Processing Properties	Metric	English	Comments
Feed Temperature	210 Â°C	410 Â°F	
Nozzle Temperature	225 Â°C	437 Â°F	
Zone 1	215 Â°C	419 Â°F	Compression Zone
Zone 2	225 Â°C	437 Â°F	Metering Zone
Mold Temperature	40.0 Â°C	104 Â°F	
Moisture Content	<= 0.10 %	<= 0.10 %	MQSA 44

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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