

PEARLTHANE® D11T75D
Thermoplastic Polyurethane Elastomer

PROVISIONAL TECHNICAL DATA SHEET

PEARLTHANE® D11T75D is a polycaprolactone copolyester based TPU, supplied in form of translucent, colorless pellets, with extremely hardness. It is especially advisable for use in producing technical parts by injection molding.

TYPICAL PHYSICAL PROPERTIES

Physical Property	Test Method	Typical Values *
Specific Gravity	ASTM D-792	1.23
Shore Hardness	ASTM D-2240	77 D
Tensile Strength	ASTM D-412	7256 psi.
Tear Strength	ASTM D-624 (Die C)	1310 lb/in
Moisture Content	MQSA 44	< 0.1 %
Melting Range (MFI=10**)	MQSA 111	388 – 406 °F

*These are typical values & should not be used for establishing specifications.

** Temperature at which MFI = 10 g/10 min @ 21.6 kg.

WORKING INSTRUCTIONS

It is recommended to dry the material before use, ideally in a desiccant dryer for 1-2 hours, with hot air or vacuum at 210 - 230°F.

INJECTION MOLDING

Based on an injection molding equipment with the following characteristics:

Closing force:	: 30 tons
Screw diameter:	: 1.02 in
L/D ratio:	: 23
Maximum hydraulic pressure:	: 3050 psi.
Mold:	: Plaque 4.7x4.7x0.08 in.

INJECTION CONDITIONS			
Feed zone	419°F	Injection pressure	1740 psi
Compression zone	428°F	Injection time	4.6 sec
Metering zone	437°F	Holding pressure	870 psi
Nozzle	437°F	Holding time	10 sec
Mold temperature	77°F	Cooling time	40 sec

Screw speed : approx. 140 rpm

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APPLICATIONS

PEARLTHANE® D11T75D can be used for injection molding of a variety of technical parts. It can also be applied as base resin for extremely tough (glass reinforced) engineering compounds.

HEALTH AND SAFETY

A safety data sheet on **PEARLTHANE® D11T75D** is available, with all the information related to safety.

PACKAGING

PEARLTHANE® D11T75D is packaged in heat-sealed, moisture proof multi-layer bags of 25 Kg net weight made of PE/Aluminium/PE. Bags are shipped on pallets of 750 Kg. Additionally, PE/Al/PE-lined cardboard gaylords of 700 Kg net weight are available.

STORAGE

Material received from Merquinsa should be inspected to assure the containers are not damaged during transportation before being stored prior to use. **PEARLTHANE® D11T75D** should be kept in a cool (60-75°F) and dry environment prior to being processed. Standard practice of consuming resin on first-in first-out basis should be employed.

For more information, please feel free to contact us at www.merquinsa.com