

PROVISIONAL TECHNICAL DATA SHEET

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

TYPICAL PHYSICAL PROPERTIES

Physical Property	Test Method	Typical Values *
Density @ 20°C	DIN 53.479	1.23 g/cm ³
Shore Hardness	DIN 53.505	77 D
Tensile Strength	DIN 53.504	50 MPa
Tear Strength	DIN 53.515	230 kN/m
Moisture Content	MQSA 44	< 0.1 %
Melting Range (MFI=10)	MQSA 111	198 – 208 °C

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

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 100-110°C.

INJECTION MOULDING

Based on an injection moulding equipment with the following characteristics:

Closing force:	30 tons
Screw diameter:	26 mm
L/D ratio:	23
Maximum hydraulic pressure:	210 bar
Mould:	Plaque 120x120x2 mm

The suggested processing conditions are the following ones

INJECTION CONDITIONS			
Feed zone	215°C	Injection pressure	120 bar
Compression zone	220°C	Injection time	4.6 sec
Metering zone	225°C	Holding pressure	60 bar
Nozzle	225°C	Holding time	10 sec
Mould temperature	25°C	Cooling time	40 sec

Screw speed: approx. 140 rpm

APPLICATIONS

PEARLTHANE® D11T75D can be used for injection moulding 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 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-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 (15-25°C) and dry environment prior to being processed. Standard practice of consuming resin on first-in first-out basis should be employed.

Our **TECHNICAL SERVICE** will answer any inquiries about our product and its applications.