

PEARLTHANE® 11T95P
Thermoplastic Polyurethane Elastomer

PEARLTHANE 11T95P is a polycaprolactone-copolyester based TPU, supplied in form of translucent, colourless or slightly yellowish pellets, combining hardness with excellent mechanical properties. A special additive package assures excellent paintability of injection moulded parts.

TYPICAL PHYSICAL PROPERTIES

Physical Property	Test Method	Typical Values *
Specific Gravity	ASTM D-792	1.19
Shore Hardness	ASTM D-2240	95 A / 49 D
Tensile Strength	ASTM D-412	6525 psi.
Elongation @ Break	ASTM D-412	460 %
Modulus @ 100% Elongation	ASTM D-412	1740 psi.
Modulus @ 300% Elongation	ASTM D-412	3625 psi.
Tear Strength	ASTM D-624 (Die C)	880 lb/in
Abrasion Loss	DIN 53.516	20 mm ³
Compression Set (70 h. @ 73°F)	ASTM D-395	%
Compression Set (24h. @ 158°F)	ASTM D-395	%
Moisture Content	MQSA 44	< 0.10 %
Melting Range (MFI=10)	MQSA 111	383-401 °F
Tg (DSC, 18 °F / min.)	DIN 51.007	- 34 ° C

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

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

WORKING INSTRUCTIONS

For optimum results, previous drying of the product during 1-2 hours at 210 - 230° F is advisable, in a hot air circulatory, vacuum or desiccant-air dryer.

INJECTION MOULDING

Based on an injection moulding equipment with the following characteristics:

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

PEARLTHANE® 11T95P
Thermoplastic Polyurethane Elastomer

The suggested processing conditions are the following ones:

INJECTION CONDITIONS			
Feed zone	385°F	Injection pressure	1250 psi
Compression zone	390°F	Injection time	3 sec
Metering zone	410°F	Holding pressure	720 psi
Nozzle	410°F	Holding time	15 sec
Mould temperature	95°F	Cooling time	30 sec

Screw speed : approx. 180 rpm.

APPLICATIONS

PEARLTHANE 11T95P is recommended for injection moulding applications such as: seals, wheels and castors, eaz-tags, shoe soles and a variety of high performance technical parts.

HEALTH AND SAFETY

A safety data sheet on **PEARLTHANE 11T95P** is available, with all information related to safety.

PACKAGING

PEARLTHANE 11T95P 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 11T95P** 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.

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