

MEXTHANE TPU B65D03 is "ULTRA HARD" a polyester based, plasticized and fully transparent TPU, exhibiting fast processing cycles. ULTRA HARD is polyester based thermoplastic polyurethane elastomer. It has good transparency, good mechanical properties, good heat resistance, humidity resistance, and excellent flexibility under very low temperature. It is both an injection and extrusion molding grade for high-end products.

Property	Value	Unit	Method	Method	Propiedad
Specific Gravity	1.19	gr/cm ³	ASTM D792	DIN 53479	Densidad
Shore Hardness	65	D	ASTM D5963	DIN 53505	Dureza Shore
Abrasion Loss	30	mm ³	ASTM D2241	DIN 53516	Abrasión
Tensile Modulus: 50%	-	MPa	ASTM D412	DIN 53504	Módulo de Young: 50 %
Tensile Modulus: 100%	17	MPa	ASTM D412	DIN 53504	Módulo de Young: 100 %
Tensile Modulus: 300%	-	MPa	ASTM D412	DIN 53504	Módulo de Young: 300 %
Tensile Strength	43	MPa	ASTM D412	DIN 53504	Resistencia a la tracción
Elongation at Break	380	%	ASTM D412	DIN 53515	Alargamiento a la rotura
Tear Strength	205	kN/mm	ASTM D624	DIN 53505	Resistencia al desgarro
VICAT Softening Point	127	°C	ASTM D1525	ISO 306	VICAT
Compression Set: 70h/23°C	23	%	ASTM D395	DIN 53517	Compression Set: 70h/23°C
Compression Set: 22h/70°C	44	%	ASTM D395	DIN 53517	Compression Set: 22h/70°C

All these physical properties are based on injection molded samples, which are conditioned at 23°C/50% for 24h. Above value s are typical values and should not be used as specifications.

Processing methods: Injection, extrusion, calendaring, T-die extrusion

Complying with FDA (21CFR 177.1680, 177.2600), RoHS, REACH, etc.

Identifiers: Chemical Name: MDI/ butylene glycol/ adipic acid copolymer

Synonyms: Polyester-based TPU

CAS # 26375-23-5

Applicaions

Elastic bands
Automotive Parts
Compounding
Footwear
Seals
Conveyor belts
Screen packs
Oil tubes

Value Propositions

Short cycle time
Good wear resistance
Excellent Mechanical Properties
Outstanding abrasion resistance

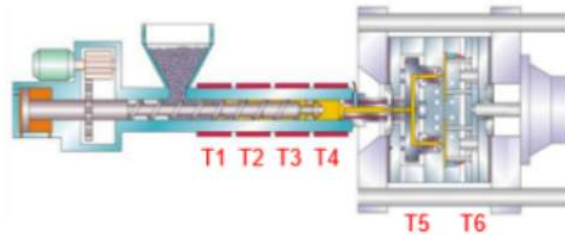
Market Segments

Plastics
Wire & cable
Footwear
Films & Sheets
Transportation
Automotive

PREDRYNG CONDITONS Material to be need dried prior processing at 80÷90°C, preferably using a dehumidifying drier feeded by air exhibiting a dew point lower than -30°C,

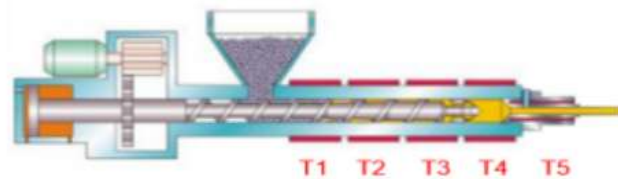
INJECTION GUIDELINES

Molding shrinkage: 1.5 ÷ 2.5%
Injection Speed: Medium - Fast
Injection Pressure: Medium - Fast
Back Pressure: Low-Medium
Holding Pressure: Sufficient to pack the mould
Cooling: Can be demoulded when parts have sufficiently cooled
Barrel temperature °C: T1: 160÷170 T2: 170÷180 T3: 190÷200 T4: 200÷205 T5/T6: 25 ÷ 45



EXTRUSION GUIDELINES

L/D Ratio: 20:1 - 25:1
Compression Ratio: 2.5 - 3.0
Breaker Plate/Screen: Both should be used
Draw Down: 5 - 10%
Cooling: Cold water bath
Barrel temperature °C: T1: 160÷170 T2: 200÷210 T3: 210÷220 T4: 200÷235 T5: 180 ÷ 200



STORAGE AND STABILITY

MEXTHANE TPU B65D03 is supplied in regular pelletized form and packaged in 25 kg bags on pallet 1000 Kg. MEXTHANE TPU B65D03 must be stored in its original and sealed containers and kept in a dry and well ventilated place, avoiding the direct sun radiation.

SHELF LIFE

The shelf life of MEXTHANE TPU B65D03 is of six months from the date of delivery to the final customer, if stored in its original sealed packaging and in proper conditions.

SAFETY

The product is not considered dangerous, nevertheless we recommend to read the Material Safety Data Sheet before handling.

The indicators / data / suggestions provided in this report are the company's control, small-scale test, pilot test or experience data for reference only. The buyer is responsible for testing the product to verify the buyer's proposed process, application field and special environment. The seller cannot control the process and production environment of subsequent processing products, so the buyer shall be responsible for the risks and hidden dangers arising from subsequent processing.