

Product Feature :

TPU 98A is an ester based thermoplastic polyurethane elastomer with 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

Classifications Plastic Type TPU

Plastic Sub-Type Polyester-based

Applications:

Wire & cable, high pressure oil tubes, conveyor belts, shoes, seals, screen packs.

Typical Properties	Test Method	Units	Typical values*
Form	N/A	-	Granules
Color	N/A	-	Transparent
Hardness	ASTM D-2240	Shore A	98
Gravity	ASTM D-792	g/cm3	1.18
100% Modulus of elasticity	ASTM D412	MPa	13
Tensile Stress	ASTM D-412	MPa	38
Tear Strength	ASTM D-624	N/mm	153
Ultimate Elongation	ASTM D-412	%	650
DIN Abrasion	DIN 53516	mm3	30
Melt Volume-Flow Rate (215°C/5Kg)	ASTM D1238	cm3/10 min.	40

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

Identifiers

Chemical Name: MDI/ butylene glycol/ adipic acid copolymer CAS # 26375-23-5 Synonyms: Polyester-based TPU

Processing methods:

Injection, extrusion, calendaring, T-die extrusion

Special features: Excellent mechanical properties, outstanding abrasion resistance, short cycle time

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

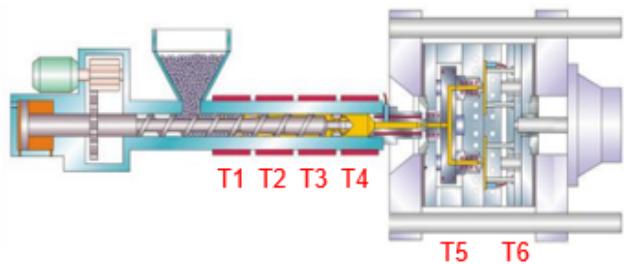
Applications	Value Propositions	Market Segments
Elastic bands	Short cycle time	Plastics
Automotive Parts	Good wear resistance	Wire & cable
Compounding	Excellent Mechanical Properties	Footwear
Footwear	Outstanding abrasion resistance	Films & Sheets
Seals		Transportation
Conveyor belts		Automotive
Injection-molded engineering components		
Screen packs		
Oil tubes		

Processing Guidelines

TECHNICAL DATA SHEET

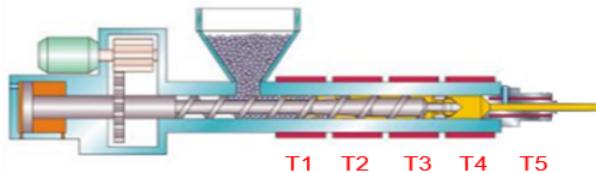
Injection Moulding Guidelines

Mold Shrinkage:	0.015 ~ 0.025 inch/inch
Injection Speed:	Medium - Fast
Injection Pressure:	Medium - Fast
Back Pressure:	Low - Medium
Holding Pressure:	Sufficient to pack the mould
	Can be demoulded when
Cooling:	parts have sufficiently cooled
Barrel Temperature (°C)	T1: 150-170 T2: 170-190 T3: 180-200 T4: 200-215 T5/T6: 25-45



Extrusion Guidelines

L/D Ration:	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: 150-170 T2: 200-210 T3: 210-230 T4: 200-235 T5: 180-200



Processing Notes:

- A、 Drying before processing, it is recommended to dry for 3-5 hours at 80 degrees centigrade. If it is damp, the drying time will be lengthened.
- B、 Cleaning the screw and die with PP or PE before and after processing.
- C、 The gate and runner can be recycled, but less than 15%.
- D、 PE/EVA base color masterbatch is better for coloring.

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