

TPU "60 A" TECHNICAL DATA SHEET

Product Feature:

TPU 60 A is a thermoplastic polyurethane elastomer. It has good 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 highend products.

Applications:

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

Product Properties:

Typical Pro <mark>pert</mark> ies	Test Method	Units	Typical values*
Form	N/A		Pellet
Color	N/A		Nature color
Hardness	ASTM D-2240	shore A	64
Gravity	ASTM D-792	g/cm ³	1.18
100% Modulus of elasticity	ASTM D412	MPa	3
Tensile Stress	ASTM D-412	MPa	22
Tear Strength	ASTM D-624	N/mm	80
Ultimate Elongation	ASTM D-412	%	600
DIN Abrasion	ISO 4649	mm³	80
Yellow Index	ASTM E313		4

^{*} 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.



Processing Guidelines:

Injection Moulding Guidelines

Mold Shrinkage: $0.015 \sim 0.025$ 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) 110-120 130-140 140-160 160-180 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 ($^{\circ}$ C) 110-120 130-150 150-160 160-170 140-150



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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