

TPU “80A” TECHNICAL DATA SHEET

Product Feature :

TPU 80A 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 high-end products.

Applications:

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

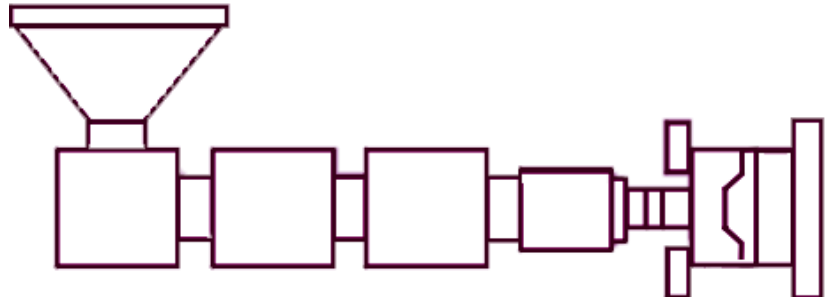
Typical Properties	Test Method	Units	Typical values*
Form	N/A	-	Granules
Color	N/A	-	Transparent
Hardness	ASTM D-2240	Shore A	80
Gravity	ASTM D-792	g/cm3	1.18
100% Modulus of elasticity	ASTM D412	MPa	6
Tensile Stress	ASTM D-412	MPa	35
Tear Strength	ASTM D-624	N/mm	100
Ultimate Elongation	ASTM D-412	%	600
DIN Abrasion	DIN 53516	mm3	60
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 ~ 0.025 inch/inch
 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

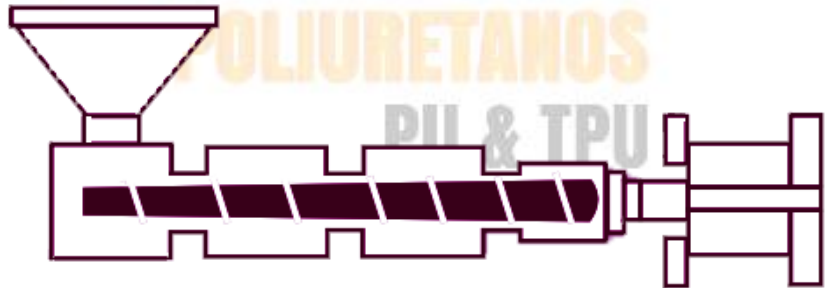


Barrel Temperature (°C)

110-120 130-140 140-160 170-180 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)

110-120 130-150 150-160 160-180 140-150



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.



The information and suggestions contained in this bulletin are to the best of our knowledge, accurate and reliable, but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchasers assume all risks and liability for the results of use of the products, including use in accordance with seller's suggestions. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or by others. There is no warranty of merchantability and there are no other warranties for the