

Product Feature :

TPU 80A is a poliester 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.

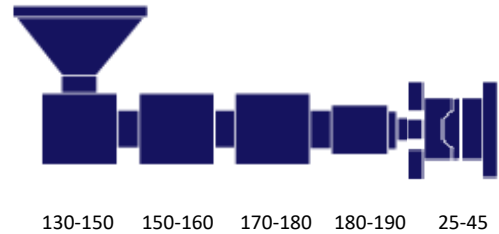
Processing Notes:

- A、 Drying is recommended to dry for 3 - 5 hours at 80 degrees centigrade.
- 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.

Processing Guidelines :

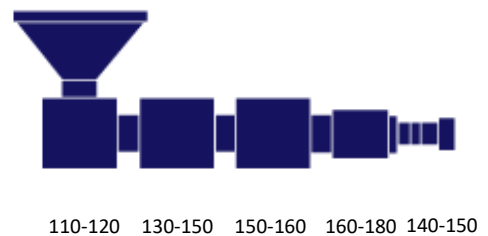
Injection Moulding Guidelines

- 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



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



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