

Topthane[™] 2180

Urethane Thermoplastic Elastomer

Product Description

Topthane[™] 2180 is a polyester-based Urethane Thermoplastic Elastomer resin in the family of Thermoplastic Elastomer (TPE). The product can be widely used in automotive accessories, protective cases, electronics, sports gear, seals, shoe parts and other applications where flexibility is needed. This grade is designed for injection molding. It is completely recyclable.

General

Appearance √Clear

Feature √Low Temperature Flexibility √Abrasion Resistance √Tear Resistance

√Oil And Chemical Resistance √Easy Processing

Compliance √RoHS √REACH

Form $\sqrt{\text{Pellet}}$ Packaging $\sqrt{25\text{kg/bag}}$

Technical Property

Typical Properties	Typical Value	Unit	Test Method
Hardness	80	Shore A	ASTM D2240
Density	1.18	g/cm ³	ASTM D792
Tensile Strength at break	36.7	MPa	ASTM D412
Tensile Strength at 100%	6.1	MPa	ASTM D412
Tensile Strength at 300%	14.3	MPa	ASTM D412
Elongation at Break	800	%	ASTM D412
Tear Strength	76.5	KN/m	ASTM D624

The data are not to be defined as specifications.

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Product Data Sheet

Processing Information

Injection	Typical Value
Rear Temperature	170-180℃
Middle Temperature	180-200℃
Front Temperature	190-210℃
Nozzle Temperature	195-205℃
Screw Speed	50-80rpm
Back Pressure	0.3-0.6MPa
Injection Pressure	50-100MPa
Holding Pressure	30-60MPa
Injection Rate	Slow

Notes

- 1) The product is incompatible with PVC. Purge thoroughly before and after use of this product with a low flow (0.5 2.5 MFR) Polyethylene (PE) or Polypropylene (PP).
- 2) Color concentrate with TPU based carrier is recommended.
- 3) The product needs to be dry before use, dry pellets for 3-4 hours at 90-110°C.

Contact Information

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