



Desmopan 453

TPU

Covestro Deutschland AG

- injection molding grade
- grease and oil-resistant
- low compression set
- good wear resistance
- Application:
 - Injection molded engineering parts
 - Automotive engineering
 - Coupling elements

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Stress (10% Elongation)	7.2	MPa	ISO 527
Stress at 100% Elongation	16.6	MPa	ISO 527
Stress at 300% Elongation	28	MPa	ISO 527
Stress at Break TPE	40	MPa	ISO 527
Strain at Break TPE	>300	%	ISO 527
Compression Set under constant strain, 70 °C	25	%	ISO 815
Tear strength	110	kN/m	ISO 34-1
Abrasion resistance	30	mm ³	ISO 4649
Shore Hardness A (15s)	97	-	ISO 868
Shore Hardness D (15s)	51	-	ISO 868
Tensile Strength	37.9	MPa	ISO 37
Strain at Break	472	%	ISO 37

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1230	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	≤110	°C	-
Melt temperature	220 - 240	°C	-
Mold temperature	20 - 40	°C	-

Characteristics

Processing

Injection Molding

Applications

Automotive

Chemical Resistance

Grease Resistance, Oil Resistance

Injection Molding

PROCESSING

Melt temperature: 220-240 °C