

**Desmopan 453 DPS041**  
TPU

Covestro Deutschland AG

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

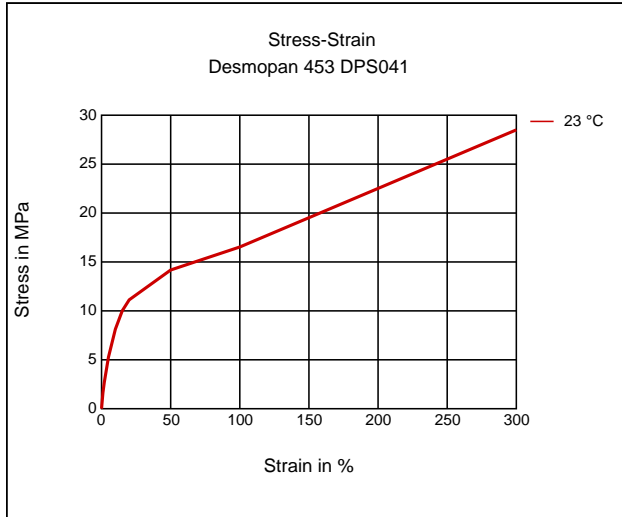
<b>Mechanical Properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Stress (10% Elongation)	7.2	MPa	ISO 527
Stress at 100% Elongation	16.6	MPa	ISO 527
Stress at 300% Elongation	28	MPa	ISO 527
Stress at Break TPE	40	MPa	ISO 527
Strain at Break TPE	>300	%	ISO 527
Compression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

<b>Other Properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Density	1230	kg/m <sup>3</sup>	ISO 1183

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	110	°C	-
Pre-drying - Time	1 - 2	h	-
Processing humidity	≤0.05	%	-
Melt temperature	220 - 240	°C	-
Mold temperature	20 - 40	°C	-

**Diagrams**

**Stress-Strain (TPE)**



**Characteristics**

**Processing**

Injection Molding

**Additives**

Release agent

**Delivery form**

Pellets

**Injection Molding**

**PREPROCESSING**

Max. water content: 0.05 %  
Max. drying temperature: 110 °C  
Drying time:  
Dry air dryer 1-2 h

**PROCESSING**

Melt temperature: 220-240 °C  
Mold temperature: 20-40 °C

**Other Extrusion**

**Preprocessing**

Max. Water content	≤0.05 %
Drying temperature	70-110 °C
Dry air dryer	1-2 h

**Profile extrusion**

**Preprocessing**

Max. Water content	≤0.05 %
Drying temperature	70-110 °C
Dry air dryer	1-2 h

**Disclaimer**

**Liability Exclusion**

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