

Texin® 285A

TPU

Covestro Deutschland AG

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.8	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Flexural modulus, 23°C	27.6	MPa	ISO 178
Flexural modulus	49.6	MPa	ISO 178
Flexural modulus temperature	-30	°C	-
Stress at 100% elongation	5.3	MPa	ISO 527
Stress at 300% elongation	13.1	MPa	ISO 527
Tensile Strength	37.9	MPa	ISO 37
Strain at break	500	%	ISO 37
Compression set at 23 °C, 24h	16	%	ISO 815
Compression set at 70 °C, 24h	65	%	ISO 815
Tear strength	87.6	kN/m	ISO 34-1
Shore A hardness	85	-	ISO 7619-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Glass transition temperature, 10°C/min	-42	°C	ISO 11357-1/-2
Vicat softening temperature, A	91	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	3.0	mm	-

Other properties	Value	Unit	Test Standard
Density	1200	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	85 - 93	°C	-
Pre-drying - Time	≥4	h	-
Processing humidity	≤0.03	%	-
Melt temperature	195 - 205	°C	-
Mold temperature	15 - 40	°C	-
Zone 1	180 - 200	°C	-
Zone 2	180 - 205	°C	-
Zone 3	180 - 210	°C	-
Nozzle temperature	185 - 210	°C	-
Screw speed	40 - 80	rpm	-
Injection pressure	41.4 - 103	MPa	-
Back pressure	5.5	MPa	-
Holding pressure	24.8 - 82.7	MPa	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Pre-drying - Temperature	85 - 93	°C	-
Pre-drying - Time	≥4	h	-
Processing humidity	≤0.03	%	-
Melt temperature	190 - 205	°C	-
Feed temperature	180 - 200	°C	-
Zone 1	180 - 205	°C	-
Zone 2	180 - 210	°C	-
Nozzle temperature	185 - 210	°C	-

Characteristics**Processing**

Injection Molding, Film Extrusion, Pipe/Tube Extrusion, Profile Extrusion, Sheet Extrusion, Wire/Cable Extrusion, Other Extrusion, Blow Molding

Delivery form

Natural Color

Features

Blending Resin, Melt Strength

Certifications

Food contact, Food approval FDA 21 CFR

Applications

Sports Equipment

Regional Availability

North America, South and Central America