

Texin 285

/ Aromatic polyester-based thermoplastic polyurethane grade with Shore A hardness of approximately 85 for injection molding, extrusion, and blow molding.

ISO Shortname

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Mold shrinkage, flow/cross to flow	Value range based on general practical experience	in/in	ASTM D955	0.008
Mechanical properties (23 °C/50 % r. h.)				
Flexural modulus	73 °F	lb/in ²	ASTM D790	4000
Flexural modulus	-22 °F	lb/in ²	ASTM D790	7200
Tensile strength		lb/in ²	ASTM D412	5000
Ultimate elongation		%	ASTM D412	500
Tensile stress at 50 % elongation		lb/in ²	ASTM D412	725
Tensile stress at 100 % elongation		lb/in ²	ASTM D412	775
Tensile stress at 300 % elongation		lb/in ²	ASTM D412	1700
Compression set, as molded	22 h at 73 °F	%	ASTM D395-B	16
Compression set, as molded	22 h at 158 °F	%	ASTM D395-B	65
Compression set, post-cured	22 h at 73 °F; post-cured 16 h at 230 °F	%	ASTM D395-B	12
Compression set, post-cured	22 h at 158 °F; post-cured 16 h at 230 °F	%	ASTM D395-B	35
Compressive load	2% deflection	lb/in ²	ASTM D575	50
Compressive load	5% deflection	lb/in ²	ASTM D575	150
Compressive load	10% deflection	lb/in ²	ASTM D575	325
Compressive load	15% deflection	lb/in ²	ASTM D575	475
Compressive load	20% deflection	lb/in ²	ASTM D575	625
Compressive load	25% deflection	lb/in ²	ASTM D575	825
Compressive load	50% deflection	lb/in ²	ASTM D575	2175
Tear strength, Die C		lbf/in	ASTM D624	500
Thermal properties				
Glass transition temperature	DMA=Dynamic Mechanical Analysis	°F	DMA	-44
Low-temperature brittle point		°F	ASTM D746	< -90
Vicat softening temperature		°F	ASTM D1525	196
UL94 Flame Class	Thickness tested: 3.0 mm	Class	UL 94	HB
Relative temperature index (Tensile impact strength)		°F	UL 746B	252
Relative temperature index (Electric strength)		°F	UL 746B	252
Other properties (23 °C)				
Specific gravity		-	ASTM D792	1.2
Shore hardness		A Scale	ASTM D2240	85
Taber abrasion	H-18 wheel; 1,000-g; 1,000 cycles	mg Loss	ASTM D3489	35
Bayshore resilience		%	ASTM D2632	45

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Publisher: Global Innovations - Polycarbonates
Bayer MaterialScience AG,
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Edition 24.02.2009

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ASTM Datasheet