



Texin 245R

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Aromatic polyester-based thermoplastic urethane with a Shore hardness of approximately 45D. It can be processed by injection molding; extrusion processes are not recommended.

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	10000
Flexural modulus	158 °F	lb/in ²	ASTM D790	4500
Izod notched impact strength		ft-lb/in	ASTM D256	no break
Tensile strength		lb/in ²	ASTM D412	6000
Ultimate elongation		%	ASTM D412	500
Tensile stress at 50 % elongation		lb/in ²	ASTM D412	1100
Tensile stress at 100 % elongation		lb/in ²	ASTM D412	1300
Tensile stress at 300 % elongation		lb/in ²	ASTM D412	2800
Compression set, as molded		%	ASTM D395-B	18
Compression set, as molded	22 h at 158 °F	%	ASTM D395-B	43
Compression set, as molded	22 h at 212 °F	%	ASTM D395-B	60
Compression set, post-cured	22 h at 73 °F; post-cured 16 h at 230 °F	%	ASTM D395-B	18
Compression set, post-cured	22 h at 158 °F; post-cured 16 h at 230 °F	%	ASTM D395-B	35
Compression set, post-cured	22 h at 212 °F; post-cured 16 h at 230 °F	%	ASTM D395-B	35
Compressive load	2% deflection	lb/in ²	ASTM D575	100
Compressive load	5% deflection	lb/in ²	ASTM D575	300
Compressive load	10% deflection	lb/in ²	ASTM D575	560
Compressive load	15% deflection	lb/in ²	ASTM D575	800
Compressive load	20% deflection	lb/in ²	ASTM D575	1000
Compressive load	25% deflection	lb/in ²	ASTM D575	1300
Compressive load	50% deflection	lb/in ²	ASTM D575	3400
Tear strength, Die C		lb/fin	ASTM D624	700
Thermal properties				
Glass transition temperature	DMA=Dynamic Mechanical Analysis	°F	DMA	-51
Low-temperature brittle point		°F	ASTM D746	< -90
Vicat softening temperature		°F	ASTM D1525	298
Other properties (23 °C)				
Specific gravity		-	ASTM D792	1.21
Shore hardness		D Scale	ASTM D2240	45
Taber abrasion	H-18 wheel; 1,000-g; 1,000 cycles	mg Loss	ASTM D3489	70
Bayshore resilience		%	ASTM D2632	45