



Texin 4210

TPU blend grades / TPU / Polycarbonate

Thermoplastic polyurethane/polycarbonate blend for injection molding and extrusion.

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 D 955	0.008
Mechanical properties (23 °C/50 % r.h.)				
Flexural modulus	73 °F	lb/in ²	ASTM D 790	100000
Izod notched impact strength	73 °F, 0.125 in	ft·lb/in	ASTM D 256	16
Izod notched impact strength	-22 °F; 0.125 in	ft·lb/in	ASTM D 256	1
Instrumented impact, Peak energy	73 °F; 0.100 in; 0.5-in dart; 1.6-in clamp; 7.6 mph	ft·lb	ASTM D 3763	35.8
Instrumented impact, Peak energy	-22 °F; 0.100 in; 0.5-in dart; 3-in clamp; 7.6 mph	ft·lb	ASTM D 3763	40.5
Shear strength		ft·lb/in ²	ASTM D 732	6200
Tensile strength		lb/in ²	ASTM D 412	6000
Ultimate elongation		%	ASTM D 412	180
Tear strength, Die C		lbf/in	ASTM D 624	900
Thermal properties				
Glass transition temperature	DMA=Dynamic Mechanical Analysis	°F	DMA	-31
Low-temperature brittle point		°F	ASTM D 746	< -90
Deflection temperature under load	66 psi	°F	ASTM D 648	208
Deflection temperature under load	264 psi	°F	ASTM D 648	139
Vicat softening temperature	Rate A; 1 kg; 50 °C/h	°F	ASTM D 1525	282
Coefficient of linear thermal expansion, flow/cross-flow		in/in/°F	ASTM D 696	5.7E-5
Other properties (23 °C)				
Specific gravity		-	ASTM D 792	1.21
Shore hardness		D Scale	ASTM D 2240	70
Taber abrasion	H-18 wheel; 1,000-g; 1,000 cycles	mg Loss	ASTM D 3489	65
Bayshore resilience		%	ASTM D 2632	45