

Datasheet

Durethan BLUEB30SF 000000

PA 6, non-reinforced, injection molding, suitable for food-contact

ISO Shortname: ISO 16396-PA 6,(R),GR,S14-030

Property	Test Condition	Unit	Standard	guide value ¹	
				dry as molded	conditioned
Mechanical properties (23 °C/50 % r. h.)					
Tensile modulus	1 mm/min	lb/in ²	ASTM D 638	464000	159000
Tensile stress at yield	-	lb/in ²	ASTM D 638	11600	5800
Tensile elongation at yield	-	%	ASTM D 638	4.0	20
Tensile elongation at break	-	%	ASTM D 638	35	> 50
Tensile stress at break	-	lb/in ²	ASTM D 638	7250	8700
Izod notched impact strength	73 °F, 0.125 in	ft-lb/in	ASTM D 256	1.1	14
Flexural modulus	-	lb/in ²	ASTM D 790	392000	102000
Flexural stress at 5 % strain	-	lb/in ²	ASTM D 790	16700	5080
Thermal properties					
Deflection temperature under load, Unannealed	66 psi; 0.157 in	°F	ASTM D 648	356	
Deflection temperature under load, Unannealed	264 psi; 0.157 in	°F	ASTM D 648	140	
UL94 Flame Class	Thickness tested: 1.5 mm	Class	UL 94	V-2	
UL94 Flame Class	Thickness tested: 3.0 mm	Class	UL 94	V-2	
Relative temperature index, mechanical with impact	Thickness tested: 1.5 mm	°C	UL 746B	65	
Relative temperature index, mechanical without impact	Thickness tested: 1.5 mm	°C	UL 746B	75	
Relative temperature index, electrical	Thickness tested: 1.5 mm	°C	UL 746B	105	
Electrical properties (23 °C/50 % r. h.)					
Dissipation factor	50 Hz	-	IEC 60250	0.05	2.3
Dissipation factor	1 MHz	-	IEC 60250	0.07	0.4
Volume resistivity		Ohm-m	IEC 60093	1E13	1E10
Surface resistivity		Ohm	IEC 60093	1E13	1E12
Dielectric strength	0.118 in	V/mil	IEC 60243-1	762	889
Dielectric constant, Tinfoil electrodes	50 Hz	-	IEC 60250	3.8	20
Dielectric constant, Tinfoil electrodes	1 MHz	-	IEC 60250	3.4	4.6
Comparative tracking index CTI		V	ASTM D 3638		600
Other properties (23 °C)					
Density		lb/in ³	ASTM D 792	0.041	
Specific gravity		-	ASTM D 792	1.14	

Notes

¹ Typical properties: these are not to be construed as specifications

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Typical Properties

Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

Flammability

Flammability results are based on small-scale laboratory tests for purposes of relative comparison and are not intended to reflect the hazards presented by this or any other material under actual fire conditions.

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