

Ultramid® 8333G HI

Polyamide 6



Product Description

Ultramid 8333G HI is a 33% glass reinforced, impact modified PA6 injection molding compound developed for applications requiring improved dry as molded toughness in combination with a balance of strength, stiffness and excellent moldability/surface aesthetics. It is also available in heat stabilized (Ultramid 8333G HI HS) and/or pigmented versions.

Applications

Ultramid 8333G HI is generally recommended for application such as front wheel chair wheels, bicycle wheels, power tool housings, chain saw housings, clips and fasteners, hose clamps and window hardware.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm	1183	1.34	
Moisture, %	62		
(24 Hour)		0.9	
(50% RH)		1.5	
(Saturation)		5.5	
MECHANICAL	ISO Test Method	Dry	Conditioned
Tensile Modulus, MPa	527		
-40C		9,200	-
23C		9,300	4,610
121C		2,660	-
Tensile stress at break, MPa	527		
23C		145	90
Tensile strain at break, %	527		
23C		3.5	6
Flexural Strength, MPa	178		
23C		215	120
Flexural Modulus, MPa	178		
23C		7,200	5,030
IMPACT	ISO Test Method	Dry	Conditioned
Izod Notched Impact, kJ/m ²	180		
23C		21	-
-40C		14	-
Charpy Notched, kJ/m ²	179		
23C		20	-
-30C		10	-
Charpy Unnotched, kJ/m ²	179		
23C		78	-
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, C	3146	220	-
HDT A, C	75	205	-
HDT B, C	75	220	-



Coef. of Linear Thermal Expansion, Parallel, mm/mm C	0.24 X10-4	-
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Coef. of Linear Thermal Expansion, Normal, mm/mm C	0.84 X10-4	-
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ELECTRICAL	ISO Test Method	Dry	Conditioned
Comparative Tracking Index	IEC 60112	600	-
Volume Resistivity	IEC 60093	>1E13	-
Dielectric Constant (100 Hz)	IEC 60250	3.6	-
Dielectric Constant (1 MHz)	IEC 60250	3.4	-
Dissipation Factor (100 Hz)	IEC 60250	100	-
Dissipation Factor (1 MHz)	IEC 60250	100	-
Dielectric Strength, KV/mm	IEC 60243-1	43	-

UL RATINGS	UL Test Method	Property Value
Flammability Rating, 1.5mm	UL94	HB
Relative Temperature Index, 1.5mm	UL746B	
Mechanical w/o Impact, C		140
Mechanical w/ Impact, C		85
Electrical, C		105

