

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	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.34	
Mold Shrinkage (1/8" bar, in/in)		0.003	
Moisture, %	D-570		
(24 Hour)		0.9	
(50% RH)		1.5	
(Saturation)		5.5	
MECHANICAL	ASTM Test Method	Dry	Conditioned
Tensile Strength, Break, MPa (psi)	D-638		
23C (73F)		152 (22,000)	90 (13,100)
Elongation, Break, %	D-638		
23C (73F)		3.5	6
Flexural Modulus, MPa (psi)	D-790		
-40C (-40F)		8,820 (1,280,000)	9,500 (1,380,000)
23C (73F)		8,000 (1,160,000)	4,830 (700,000)
65C (149F)		4,040 (586,000)	3,290 (477,000)
90C (194F)		3,280 (476,000)	3,250 (471,000)
121C (250F)		3,040 (441,000)	2,970 (431,000)
Flexural Strength, MPa (psi)	D-790		
-40C (-40F)		310 (45,000)	297 (43,100)
23C (73F)		241 (34,900)	124 (18,000)
65C (149F)		130 (18,900)	110 (16,000)
90C (194F)		105 (15,200)	100 (14,500)
121C (250F)		89 (12,900)	90 (13,100)
Rockwell Hardness, R Scale	D-785	121	-
IMPACT	ASTM Test Method	Dry	Conditioned
Notched Izod Impact, J/M (ft-lbs/in)	D-256		
23C (73F)		239 (4.5)	-
Drop Weight Impact, ft-lbs, 23C	BASF Drop Weight Impact Test	3.6	-
THERMAL	ASTM Test Method	Dry	Conditioned
Melting Point, C(F)	D-3418	220 (428)	-
Heat Deflection @ 264 psi (1.8 MPa) C(F)	D-648	210 (410)	-



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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	
ELECTRICAL		ASTM Test Method		Dry	Conditioned
Volume Resistivity, 1.5 mm		D-257		>1E13	-

