

Ultramid® 8233G HS

Polyamide 6

Product Description

Ultramid 8233G HS is a heat stabilized, 33% glass fiber reinforced PA6 injection molding compound offering excellent strength, stiffness, high temperature performance and dimensional stability. It is also available in non-heat stabilized (Ultramid 8233G) and/or pigmented versions.

Applications

Ultramid 8233G HS is generally recommended for applications such as power tool housings, weed trimmer components, gears, automotive housings and under hood applications.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm	1183	1.39	
Moisture, %	62		
(24 Hour)		1.1	
(50% RH)		1.8	
(Saturation)		6.4	
MECHANICAL	ISO Test Method	Dry	Conditioned
Tensile Modulus, MPa	527		
-40C		10,500	11,600
23C		10,100	5,840
80C		4,430	4,300
121C		3,550	3,400
Tensile stress at break, MPa	527		
-40C		283	255
23C		185	125
80C		110	80
121C		83	60
Tensile strain at break, %	527		
23C		3.5	6
Flexural Strength, MPa	178		
23C		260	130
Flexural Modulus, MPa	178		
23C		8,200	5,200
IMPACT	ISO Test Method	Dry	Conditioned
Izod Notched Impact, kJ/m ²	180		
23C		10	-
-40C		8.5	-
Charpy Notched, kJ/m ²	179		
23C		15	-
-30C		10	-
Charpy Unnotched, kJ/m ²	179		
23C		88	-
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, C	3146	220	-



HDT A, C	75	205	-
HDT B, C	75	215	-
Coef. of Linear Thermal Expansion, Parallel, mm/mm C		0.21 X10-4	-
Coef. of Linear Thermal Expansion, Normal, mm/mm C		0.7 X10-4	-
ELECTRICAL	ISO Test Method	Dry	Conditioned
Volume Resistivity	IEC 60093	>1E13	-
Dielectric Constant (100 Hz)	IEC 60250	4.2	-
Dielectric Constant (1 MHz)	IEC 60250	3.6	-
Dissipation Factor (100 Hz)	IEC 60250	200	-
Dissipation Factor (1 MHz)	IEC 60250	200	-
Dielectric Strength, KV/mm	IEC 60243-1	44	-
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		115	
Electrical, C		140	

