

# Ultramid® 8233G HS BK-102

## Polyamide 6

### Product Description

Ultramid 8233G HS BK-102 is a heat stabilized, black pigmented, 33% glass fiber reinforced PA6 injection molding compound. The higher glass fiber reinforcement results in excellent strength, stiffness, high temperature performance and dimensional stability with a high resistance to creep under load. The heat stabilizer system extends properties at elevated temperatures. It offers easy processing and good aesthetics. It maintains its inherent chemical resistance to greases, oils and hydrocarbons. It is suited for metal replacement.

### Applications

Ultramid 8233G HS BK-102 is generally recommended for applications such as chain saw, power tool housings, weed trimmer components, gears, automotive window hardware, under hood applications including cables, fittings, cooling fans, electrical connectors and coil bobbins.

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		10,300	-
23C		10,200	5,600
80C		4,820	-
121C		4,010	-
Tensile stress at break, MPa	527		
-40C		230	-
23C		170	99
80C		90	-
121C		70	-
Tensile strain at break, %	527		
23C		3	7
Flexural Strength, MPa	178		
23C		245	130
Flexural Modulus, MPa	178		
23C		8,500	5,200
IMPACT	ISO Test Method	Dry	Conditioned
Charpy Notched, kJ/m <sup>2</sup>	179		
23C		10	-
-30C		10	-
Charpy Unnotched, kJ/m <sup>2</sup>	179		
23C		65	-
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, C	3146	220	-



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HDT A, C	75	205	-
HDT B, C	75	215	-
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

