

# Ultramid® 8231G HS BK-102

## Polyamide 6

### Product Description

Ultramid 8231G HS BK-102 is a black pigmented heat stabilized, 15% glass fiber reinforced PA6 injection molding compound. The glass fiber reinforcement enhances performance such as strength, stiffness and heat deflection temperature. The heat stabilizer system extends the properties at elevated temperatures. It also has excellent chemical resistance to greases, oils and hydrocarbons.

### Applications

Ultramid 8231G HS BK-102 is ideally suited for more demanding performance applications such as safety helmet parts, washers, gears, engine and motor parts, chutes, and higher temperature environments.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm	1183	1.23	
Moisture, %	62		
(24 Hour)		1.4	
(50% RH)		2.3	
(Saturation)		8.1	
MECHANICAL	ISO Test Method	Dry	Conditioned
Tensile Modulus, MPa	527		
-40C		6,880	6,900
23C		6,130	3,100
80C		2,450	2,300
121C		2,020	1,800
Tensile stress at break, MPa	527		
-40C		150	150
23C		130	60
80C		60	30
121C		50	40
Tensile strain at break, %	527		
23C		3	20
Flexural Strength, MPa	178		
23C		160	65
Flexural Modulus, MPa	178		
23C		4,770	2,210
IMPACT	ISO Test Method	Dry	Conditioned
Charpy Notched, kJ/m <sup>2</sup>	179		
23C		4	-
Charpy Unnotched, kJ/m <sup>2</sup>	179		
23C		31	-
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, C	3146	220	-
HDT A, C	75	196	-
HDT B, C	75	210	-



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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		105
Mechanical w/ Impact, C		105
Electrical, C		130

