Product Information

Ultramid® 8233G HS BK-102
Polyamide 6

BASF
The Chemical Company

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	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.39	
Mold Shrinkage (1/8" bar, in/in)		0.003	
Moisture, %	D-570		
(24 Hour)		1.1	
(50% RH)		1.8	
(Saturation)		6.4	
MECHANICAL	**ASTM Test Method**	**Dry**	**Conditioned**
Tensile Strength, Break, MPa (psi)	D-638		
-40C (-40F)		230 (33,400)	-
23C (73F)		180 (26,100)	99 (14,400)
80C (176F)		90 (13,100)	-
121C (250F)		70 (10,200)	-
Elongation, Break, %	D-638		
23C (73F)		3.5	7
Flexural Modulus, MPa (psi)	D-790		
23C (73F)		8,990 (1,300,000)	-
Flexural Strength, MPa (psi)	D-790		
23C (73F)		280 (40,600)	-
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)		110 (2.1)	-
Drop Weight Impact, ft-lbs, 23C	BASF Drop Weight Impact Test	3	-
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	208 (406)	-
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	218 (424)	-
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	0.38 X10-4	-

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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		115
Electrical, C		140