

Ultramid® B3EG3

Polyamide 6

Product Description

Ultramid B3EG3 is a 15% glass fiber reinforced injection molding PA6 grade for housings with enhanced impact resistance.

Applications

Typical applications include automotive mirror housings and wheels of mountain bikes.

PHYSICAL	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.23	
Mold Shrinkage (1/8" bar, in/in)		0.005	
Moisture, %	D-570		
(50% RH)		2.3	
(Saturation)		7.7	
MECHANICAL	ASTM Test Method	Dry	Conditioned
Tensile Strength, Break, MPa (psi)	D-638		
23C (73F)		103 (14,900)	-
Elongation, Break, %	D-638		
23C (73F)		3.5	-
Flexural Modulus, MPa (psi)	D-790		
23C (73F)		5,170 (750,000)	-
IMPACT	ASTM Test Method	Dry	Conditioned
Notched Izod Impact, J/M (ft-lbs/in)	D-256		
-40C (-40F)		48 (0.9)	-
23C (73F)		59 (1.1)	-
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	190 (374)	-
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	215 (419)	-
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	0.2 X10-4	-
UL RATINGS	UL Test Method	Property Value	
Flammability Rating, 1.5mm	UL94	HB	
Relative Temperature Index, 1.5mm	UL746B		
Mechanical w/o Impact, C		130	
Mechanical w/ Impact, C		95	
Electrical, C		120	
ELECTRICAL	ASTM Test Method	Dry	Conditioned
Volume Resistivity, 1.5 mm	D-257	1E13	1E10

