Product Information

Ultramid® 8351 HS BK-102
Polyamide 6

BASF
The Chemical Company

Product Description

Ultramid 8351 HS BK-102 is a heat stabilized, pigmented black, impact modified type 6 nylon graft copolymer developed for injection molding applications requiring a high level of toughness combined with a moderate flexibility and faster cycles. Excellent thermal and chemical resistance properties provided by the nylon backbone. It demonstrates the highest impact performance within the Ultramid copolymer product line while maintaining an excellent balance of strength and stiffness. Excellent chemical resistance to greases, oils and hydrocarbons.

Applications

Ultramid 8351 HS BK-102 is generally recommended for applications suchas spray gun and power tool handles, trim clips and fasteners, wall anchors and automotive roof clips rack components.

PHYSICAL	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.07	
Mold Shrinkage (1/8" bar, in/in)		0.014	
Moisture, %	D-570		
(24 Hour)		1.1	
(50% RH)		1.9	
(Saturation)		6.7	
MECHANICAL	**ASTM Test Method**	**Dry**	**Conditioned**
Tensile Strength, Yield, MPa (psi)	D-638		
23C (73F)		55 (7,970)	-
Elongation, Yield, %	D-638		
23C (73F)		5	-
Elongation, Break, %	D-638		
23C (73F)		>100	-
Flexural Modulus, MPa (psi)	D-790		
23C (73F)		1,690 (245,000)	-
Flexural Strength, MPa (psi)	D-790		
23C (73F)		66 (9,570)	-
Rockwell Hardness, R Scale	D-785	78	-
IMPACT	**ASTM Test Method**	**Dry**	**Conditioned**
Notched Izod Impact, J/M (ft-lbs/in)	D-256		
23C (73F)		NB	-
Drop Weight Impact, ft-lbs, 23C	BASF Drop Weight Impact Test	210	-
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	55 (131)	-
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	1.06 X10-4	-
UL RATINGS	**UL Test Method**	**Property Value**	
Flammability Rating, 1.5mm	UL94	HB	
Relative Temperature Index, 1.5mm	UL746B		

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Mechanical w/o Impact, C		105	
Mechanical w/ Impact, C		105	
Electrical, C		105	
ELECTRICAL	**ASTM Test Method**	**Dry**	**Conditioned**
Volume Resistivity, 1.5 mm	D-257	>1E13	-