

Ultramid® 8270 HS

Polyamide 6

Product Description

Ultramid 8270 HS is a thermally modified PA6 blow molding compound exhibiting exceptional toughness and melt strength ideally suited for blow molding, profile extrusion, and other applications requiring extra high melt viscosity. It exhibits excellent permeability and chemical resistance to oils, hydrocarbons and most solvents.

Applications

Ultramid 8270 HS is generally recommended for applications such as industrial containers, small gasoline tanks, and automotive under hood reservoirs.

PHYSICAL	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.13	
Moisture, %	D-570		
(24 Hour)		1.6	
(50% RH)		2.6	
(Saturation)		9.2	
MECHANICAL	ASTM Test Method	Dry	Conditioned
Tensile Strength, Yield, MPa (psi)	D-638		
-40C (-40F)		138 (20,000)	119 (17,300)
23C (73F)		84 (12,200)	46 (6,670)
121C (250F)		24 (3,480)	-
Elongation, Yield, %	D-638		
23C (73F)		4	
Elongation, Break, %	D-638		
23C (73F)		>100	-
Flexural Modulus, MPa (psi)	D-790		
-40C (-40F)		3,160 (458,000)	3,900 (566,000)
23C (73F)		2,900 (420,000)	760 (110,000)
65C (149F)		435 (63,100)	-
90C (194F)		310 (45,000)	-
121C (250F)		260 (37,700)	-
Flexural Strength, MPa (psi)	D-790		
-40C (-40F)		179 (26,000)	176 (25,500)
23C (73F)		114 (16,500)	37 (5,360)
65C (149F)		30 (4,350)	-
90C (194F)		20 (2,900)	-
121C (250F)		17 (2,460)	-
Rockwell Hardness, R Scale	D-785	99	-
IMPACT	ASTM Test Method	Dry	Conditioned
Notched Izod Impact, J/M (ft-lbs/in)	D-256		
-40C (-40F)		53 (1.0)	48 (0.9)
23C (73F)		53 (1.0)	NB
THERMAL	ASTM Test Method	Dry	Conditioned



Ultramid® 8270 HS



Melting Point, C(F)	D-3418	220 (428)	-
Heat Deflection @ 264 psi (1.8 MPa) C(F)	D-648	63 (145)	-
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	169 (336)	-
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	1.35 X10-4	-

