

Ultramid® 8202CQ

Polyamide 6

Product Description

Ultramid 8202CQ is a low viscosity, PA6 injection molding homopolymer, possessing a modified crystalline structure for increased property performance and faster cycles.

Applications

Ultramid 8202CQ is generally recommended for applications such as furniture casters, gears, window hardware, end fittings, insulators, bushings, slides, valves, relays, wiring devices, and other electrical components.

PHYSICAL	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.13	
Mold Shrinkage (1/8" bar, in/in)		0.01	
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)		137 (19,900)	142 (20,600)
23C (73F)		90 (13,100)	43 (6,240)
80C (176F)		40 (5,800)	-
121C (250F)		25 (3,620)	-
Elongation, Yield, %	D-638		
23C (73F)		4	14
Elongation, Break, %	D-638		
23C (73F)		10	>100
Flexural Modulus, MPa (psi)	D-790		
-40C (-40F)		3,370 (489,000)	4,280 (621,000)
23C (73F)		3,170 (460,000)	970 (141,000)
121C (250F)		385 (55,800)	-
Flexural Strength, MPa (psi)	D-790		
-40C (-40F)		183 (26,500)	168 (24,400)
23C (73F)		110 (16,000)	42 (6,090)
121C (250F)		21 (3,040)	-
Rockwell Hardness, R Scale	D-785	120	-
IMPACT	ASTM Test Method	Dry	Conditioned
Notched Izod Impact, J/M (ft-lbs/in)	D-256		
-40C (-40F)		32 (0.6)	21 (0.4)
23C (73F)		48 (0.9)	160 (3.0)
Drop Weight Impact, ft-lbs, 23C	BASF Drop Weight Impact Test	150	-
THERMAL	ASTM Test Method	Dry	Conditioned
Melting Point, C(F)	D-3418	220 (428)	-



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Heat Deflection @ 264 psi (1.8 MPa) C(F)	D-648	75 (167)	-
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	190 (374)	-
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	0.81 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		85
Mechanical w/ Impact, C		75
Electrical, C		125

