



Ultramid® B3S Q661

BASF Corporation - Polyamide 6

Monday, November 4, 2019

General Information

Product Description

Ultramid B3S Q661 is a general purpose, PA6 resin for injection molding.

Applications

Ultramid B3S Q661 is suitable for wide range of applications due to its rapid cycling and excellent physical properties.

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Fast Molding Cycle • General Purpose • Oil Resistant
Uses	• General Purpose
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Density	1.13	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	150	cm ³ /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	464000	psi	ISO 527-2
Tensile Strength (Yield, 73°F)	11500	psi	ASTM D638
Tensile Stress (Yield, 73°F)	12300	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	3.8	%	ISO 527-2
Tensile Elongation (Break, 73°F)	4.2	%	ASTM D638
Flexural Modulus (73°F)	397000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.4	ft·lb/in ²	ISO 179
Notched Izod Impact (73°F)	0.99	ft·lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	356	°F	ASTM D648
Heat Deflection Temperature (66 psi, Unannealed)	356	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	169	°F	ASTM D648
Heat Deflection Temperature (264 psi, Unannealed)	149	°F	ISO 75-2/A
Peak Melting Temperature	428	°F	ASTM D3418
Melting Temperature (DSC)	428	°F	ISO 3146
RTI Elec			UL 746
0.030 in	266	°F	
0.06 in	266	°F	
0.12 in	266	°F	

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Thermal	Nominal Value	Unit	Test Method
RTI Imp			UL 746
0.06 in	167	°F	
0.12 in	167	°F	
RTI Str			UL 746
0.06 in	230	°F	
0.12 in	239	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in	V-2		
0.06 in	V-2		
0.12 in	V-2		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	464 to 545	°F
Mold Temperature	149 to 176	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

Notes

¹ Typical properties: these are not to be construed as specifications.