



Ultramid® B3U Q721 BK23079

BASF Corporation - Polyamide 6

Monday, November 4, 2019

General Information

Product Description

Ultramid B3U Q721 BK23079 is an injection molding grade, flame-retardant, free from halogen and phosphorus, and UL94 V0 approved. Technical molded parts are used for electrical engineering.

General

Material Status	• Commercial: Active
Availability	• North America
Features	<ul style="list-style-type: none"> • Flame Retardant • Halogen Free • Low (to None) Phosphorus Content • Oil Resistant
Uses	• Electrical/Electronic Applications
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.18	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	551000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	11600	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.0	%	ISO 527-2
Flexural Modulus (73°F)	493000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	1.3	ft-lb/in ²	
73°F	1.4	ft-lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	167	°F	ISO 75-2/A
Melting Temperature (DSC)	428	°F	ISO 3146

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.