Ultramid® 8202C (Cond)

Polyamide 6

BASF Corporation

IDES | Prospector

Product Description

Ultramid 8202C is a modified crystalline and low viscosity, PA6 injection molding homopolymer. It is also available in heat stabilized (Ultramid 8202C HS) and/or pigmented versions. Its unique crystalline structure results in increased strength, stiffness, heat distortion temperature and performance under load as a homopolymer. It also cycles faster while maintaining properties and chemical resistance.

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Crystalline • Fast Molding Cycle • Good Chemical Resistance	• Good Processability • Good Stiffness • High Heat Resistance	• High Strength • Homopolymer • Low Viscosity
Uses	• Bushings • Connectors • Electrical Parts	• Electrical/Electronic Applications • Fittings • Furniture	• Gears • Industrial Applications • Valves/Valve Parts
Agency Ratings	• ASTM D 4066	• NSF 14	• ULC Unspecified Rating
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1)	

Mechanical	Nominal Value	Unit	Test Method
Tensile modulus	1360	MPa	ISO 527-2 [2]
Tensile Strength			
Yield, -40°C	142	MPa	ASTM D638 ISO 527-2
Yield, 23°C	48.0	MPa	ASTM D638
Yield, 80°C	30.0	MPa	ASTM D638 ISO 527-2
Yield, 121°C	25.0	MPa	ASTM D638 ISO 527-2
Yield	43.0	MPa	ISO 527-2 [2]
Break, -40°C	80.0	MPa	ASTM D638
Break, 23°C	70.0	MPa	ASTM D638
Break, 80°C	30.0	MPa	ASTM D638
Break, 121°C	20.0	MPa	ASTM D638
Tensile Elongation			
Yield, -40°C	3.0	%	ASTM D638
Yield, 23°C	22	%	ASTM D638
Yield, 80°C	25	%	ASTM D638
Yield, 121°C	30	%	ASTM D638
Yield	22	%	ISO 527-2 [2]
Break, -40°C	3.0	%	ASTM D638
Break, 23°C	> 100	%	ASTM D638
Break, 80°C	> 100	%	ASTM D638
Break, 121°C	> 100	%	ASTM D638
Nominal strain at break	> 50	%	ISO 527-2 [2]
Flexural Modulus			ASTM D790
-40°C	4200	MPa	
23°C	970	MPa	
Flexural Strength			ASTM D790
-40°C	168	MPa	
23°C	42.0	MPa	

Revision History
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Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	21.0	J/m	
23°C	171	J/m	
Drop Impact Resistance (23°C)	> 271	J	Internal Method

Notes

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

[2] Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

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