Ultramid® 8202 (Cond)

Polyamide 6

BASF Corporation

Product Description

Ultramid 8202 is a low viscosity, general purpose PA6 injection molding homopolymer exhibiting excellent melt fluidity for filling thin sections. It is also available in heat stabilized (Ultramid 8202 HS) and/or pigmented versions. It combines good strength, stiffness and toughness as well as excellent heat, chemical and abrasion resistance.

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• General Purpose • Good Abrasion Resistance • Good Chemical Resistance • Good Stiffness	• Good Toughness • High Flow • High Heat Resistance • High Strength	• Homopolymer • Low Viscosity
Uses	• Bearings • Caps • Connectors	• Electrical Parts • Fasteners • Fittings	• Gears
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			
80°C	550	MPa	ISO 527-2
121°C	320	MPa	ISO 527-2
--	970	MPa	ISO 527-2 [2]
Tensile Strength			
Yield, -40°C	110	MPa	ASTM D638 ISO 527-2
Yield, 23°C	36.0	MPa	ASTM D638
Yield, 80°C	30.0	MPa	ASTM D638 ISO 527-2
Yield, 121°C	20.0	MPa	ASTM D638 ISO 527-2
Yield	36.0	MPa	ISO 527-2 [2]
Break, 23°C	60.0	MPa	ASTM D638
Tensile Elongation			
Yield, 23°C	16	%	ASTM D638
Yield, 80°C	35	%	ASTM D638
Yield, 121°C	40	%	ASTM D638
Yield	16	%	ISO 527-2 [2]
Break, 23°C	> 100	%	ASTM D638
Nominal strain at break	> 50	%	ISO 527-2 [2]
Flexural Modulus			
-40°C	3660	MPa	ASTM D790
23°C	740	MPa	ASTM D790
23°C	770	MPa	ISO 178
Flexural Strength			
-40°C	154	MPa	ASTM D790
23°C	35.0	MPa	ASTM D790
23°C	25.0	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	43.0	J/m	
23°C	No Break		
Drop Impact Resistance (23°C)	> 271	J	Internal Method

Revision History
Document Created: Wednesday, December 16, 2009
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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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