Ultramid® 8253 (Cond)

Polyamide 6

BASF Corporation

Product Description
Ultramid 8253 is an unreinforced, impact modified type 6 graft copolymer developed for both injection molding and extrusion applications. It is also available in heat stabilized (Ultramid 8253 HS) and/or pigmented versions. Copolymerization results in improved dry as molded toughness and increased flexibility to meet higher impact performance compared to conventional unreinforced homopolymers. Good nylon thermal and chemical properties are maintained along with good strength and stiffness retention.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Impact Modifier		
Features	• Copolymer • Good Abrasion Resistance • Good Chemical Resistance • Good Dimensional Stability • Good Flexibility	• Good Flow • Good Impact Resistance • Good Processability • Good Stiffness • Good Thermal Stability	• Good Toughness • High Strength • Impact Modified • Low Viscosity • Semi Crystalline
Uses	• Automotive Applications • Electrical Parts	• Fasteners • Safety Guards	• Sporting Goods • Tubing
Agency Ratings	• 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			
-40°C	3300	MPa	ISO 527-2
80°C	370	MPa	ISO 527-2
121°C	220	MPa	ISO 527-2
--	730	MPa	ISO 527-2 [2]
Tensile Strength			
Yield, -40°C	116	MPa	ASTM D638 ISO 527-2
Yield, 23°C	32.0	MPa	ASTM D638
Yield, 80°C	20.0	MPa	ASTM D638 ISO 527-2
Yield	32.0	MPa	ISO 527-2 [2]
Break, -40°C	70.0	MPa	ASTM D638
Tensile Elongation			
Yield, 23°C	15	%	ASTM D638
Yield, 121°C	30	%	ASTM D638
Yield	15	%	ISO 527-2 [2]
Break, -40°C	20	%	ASTM D638
Break, 23°C	> 100	%	ASTM D638
Nominal strain at break	> 50	%	ISO 527-2 [2]
Flexural Modulus			ASTM D790
-40°C	3150	MPa	
23°C	670	MPa	
Flexural Strength			ASTM D790
-40°C	141	MPa	
23°C	32.0	MPa	

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	64.0	J/m	
23°C	No Break		

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Friday, December 18, 2009

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.