

Ultramid® 8253 HS BK-102

Polyamide 6

BASF Corporation

Product Description

Ultramid 8253 HS BK-102 is a heat stabilized, pigmented black, impact modified type 6 nylon graft copolymer developed for both injection molding and extrusion applications. It exhibits varying levels of toughness and flexibility combined with excellent thermal and chemical properties.

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Heat Stabilizer	• 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 Aging Resistance • Good Thermal Stability • Good Toughness	• Heat Stabilized • High Strength • Impact Modified • Low Viscosity • Semi Crystalline
Uses	• Fasteners • Housings	• Lawn and Garden Equipment • Plugs	• Tubing
Agency Ratings	• ULC Unspecified Rating		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Specific Gravity	--	1.09 g/cm ³	ASTM D792
--	--	1090 kg/m ³	ISO 1183 ²
Molding Shrinkage - Flow (3.18 mm)	1.2	%	ASTM D955
Water Absorption			
24 hr	1.5	%	ASTM D570
24 hr, 23°C	1.5	%	ISO 62
Saturation	8.1	%	ASTM D570 ISO 62 ²
Equilibrium, 50% RH	2.3	%	ASTM D570
Equilibrium	2.3	%	ISO 62 ²

Mechanical	Nominal Value	Unit	Test Method
Tensile modulus	2400	MPa	ISO 527-2 ²
Tensile Strength			
Yield, 23°C	65.0	MPa	ASTM D638
Yield	60.0	MPa	ISO 527-2 ²
Tensile Elongation			
Yield, 23°C	4.0	%	ASTM D638
Yield	4.0	%	ISO 527-2 ²
Break, 23°C	> 100	%	ASTM D638
Nominal strain at break	40	%	ISO 527-2 ²
Flexural Modulus			
23°C	2270	MPa	ASTM D790
23°C	1900	MPa	ISO 178
Flexural Strength			
23°C	85.0	MPa	ASTM D790
23°C	65.0	MPa	ISO 178

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

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备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

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Friday, December 18, 2009

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength (23°C)	17.0	kJ/m ²	ISO 179/1eA ²
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Notched Izod Impact			
23°C	150	J/m	ASTM D256
23°C	14.0	kJ/m ²	ISO 180
Drop Impact Resistance (23°C)	271	J	Internal Method
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	82		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, Unannealed	60.0	°C	ASTM D648
1.8 MPa	55.0	°C	ISO 75-2 ²
Melting Temperature	220	°C	ASTM D3418 ISO 3146
CLTE - Flow	0.000099	cm/cm/°C	ASTM E831
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.50 mm)	HB		UL 94
UL 746	Nominal Value	Unit	Test Method
RTI Str (1.50 mm)	105	°C	UL 746
RTI Imp (1.50 mm)	105	°C	UL 746
RTI Elec (1.50 mm)	105	°C	UL 746
Injection	Nominal Value	Unit	
Drying Temperature	80.0	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.20	%	
Processing (Melt) Temp	240 to 270	°C	
Mold Temperature	60.0 to 85.0	°C	
Injection Pressure	3.50 to 12.5	MPa	
Injection Rate	Fast		

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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