

# Pro-fax 6523

## LyondellBasell Industries - Polypropylene Homopolymer

Thursday, December 21, 2023

### General Information

#### Product Description

Pro-fax 6523 general purpose polypropylene homopolymer resin is available in pellet form.

An ASTM and ISO-based versions of the technical datasheet are available for Pro-fax 6523.

For regulatory compliance information see Pro-fax 6523 Product Stewardship Bulletin (PSB).

#### General

Material Status	• Commercial: Active		
Regional Availability	• North America		
Features	• Good Stiffness • Heat Aging Resistant	• High ESCR (Stress Crack Resist.) • Homopolymer	
Uses	• Food Containers	• Household Goods	• Thermoformed Containers
Automotive Specifications	• CHRYSLER MS-DB-500 CPN1537 Color: Natural • FORD ESA-M4D134-A	• FORD ESF-M4D135-A • GM GMP.PP.013 Color: Natural	
Processing Method	• Extrusion	• Injection Molding	• Thermoforming

### ASTM & ISO Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity			
--	0.900	0.900	ASTM D792B
--	0.900 g/cm <sup>3</sup>	0.900 g/cm <sup>3</sup>	ISO 1183/A
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ASTM D1238
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength			
Yield <sup>2</sup>	4790 psi	33.0 MPa	ASTM D638
Yield, 73°F (23°C)	4350 psi	30.0 MPa	ISO 527-2
Tensile Elongation			
Yield	12 %	12 %	ASTM D638
Yield, 73°F (23°C)	12 %	12 %	ISO 527-2
Flexural Modulus			
1% Secant <sup>3</sup>	200000 psi	1380 MPa	ASTM D790A
73°F (23°C)	184000 psi	1270 MPa	ISO 178

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Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	3.2 ft·lb/in <sup>2</sup>	6.7 kJ/m <sup>2</sup>	ISO 179
Notched Izod Impact			
73°F (23°C)	0.99 ft·lb/in	53 J/m	ASTM D256A
73°F (23°C)	3.0 ft·lb/in <sup>2</sup>	6.2 kJ/m <sup>2</sup>	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	190 °F	88.0 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	174 °F	79.0 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	122 °F	50.0 °C	ISO 75-2/A

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min (50 mm/min)

<sup>3</sup> 0.051 in/min (1.3 mm/min)

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