



Pro-fax 6523

LyondellBasell Industries - Polypropylene Homopolymer

Wednesday, January 29, 2020

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 ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|--|---------------------------|-------------------------|-------------|
| Density / Specific Gravity | | | |
| -- | 0.900 | 0.900 | ASTM D792B |
| -- | 0.900 g/cm ³ | 0.900 g/cm ³ | 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 ² | 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 ³ | 200000 psi | 1380 MPa | ASTM D790A |
| 73°F (23°C) | 184000 psi | 1270 MPa | ISO 178 |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Charpy Notched Impact Strength (73°F (23°C)) | 3.2 ft-lb/in ² | 6.7 kJ/m ² | 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 ² | 6.2 kJ/m ² | ISO 180 |

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| 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

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

² 2.0 in/min (50 mm/min)

³ 0.051 in/min (1.3 mm/min)