

# Purell PE 3020 D

Low Density Polyethylene  
LyondellBasell Industries

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## Technical Data

### Product Description

Purell PE 3020 D is a low density polyethylene with high rigidity, good opticals and good chemical resistance. It is delivered in pellet form. The grade is used by our customers for small blow mouldings including packaging of pharmaceuticals in blow fill seal technology and injection moulding for medical devices, closures and seals.

Without exception, all potential activities for applications in the pharmaceutical, medical device, laboratory and diagnostics area have to be discussed with the relevant Technical (P & AD) and Business contacts first.

To discuss a medical/pharmaceutical application please contact: your local Distributor or your local Basell contact.

### General

Material Status	• Commercial: Active		
Literature <sup>1</sup>	• <a href="#">Processing - Mold Shrink (English)</a> • <a href="#">Processing - Polyolefin Injection Molding Guide (English)</a> • <a href="#">Technical Datasheet - ASTM (English)</a> • <a href="#">Technical Datasheet - ISO (English)</a>		
Search for UL Yellow Card	• <a href="#">LyondellBasell Industries</a>		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Ethylene Oxide Sterilizable	• Good Optical Properties • High Rigidity	
Uses	• Blow Molding Applications • Bottles • Caps	• Closures • Film • Medical/Healthcare Applications	• Pharmaceuticals • Seals • Vials
Forms	• Pellets		
Processing Method	• Blown Film	• Extrusion Blow Molding	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density	0.927 g/cm <sup>3</sup>	ISO 1183 ASTM D1505
Apparent (Bulk) Density	> 0.50 g/cm <sup>3</sup>	ISO 60
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.30 g/10 min	ASTM D1238 ISO 1133
Environmental Stress-Cracking Resistance (ESCR)	16.0 hr	ASTM D1693
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
1% Secant	434 MPa	ASTM D638
23°C	300 MPa	ISO 527-2
Tensile Strength		
Yield	15.2 MPa	ASTM D638
Yield, 23°C	13.0 MPa	ISO 527-2
Break	15.2 MPa	ASTM D638
Tensile Elongation (Break)	700 %	ASTM D638
Flexural Modulus - 1% Secant	414 MPa	ASTM D790
Films	Nominal Value Unit	
Film Thickness - Recommended / Available	60 to 150 µm	
Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D)	51	ISO 868
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed	46.0 °C	
Vicat Softening Temperature	102 °C	ASTM D1525 ISO 306/A50
Melting Temperature (DSC)	114 °C	ISO 3146



Extrusion	Nominal Value Unit
Melt Temperature	170 to 220 °C

#### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.



## Where to Buy

### Supplier

#### LyondellBasell Industries

Wilmington, DE USA

Telephone: 713-309-7200

Web: <https://www.lyondellbasell.com/>

### Distributor

#### ALBIS Plastic

*ALBIS Plastic is a global distribution and compounding company. Contact ALBIS Plastic for availability of individual products per country.*

Telephone: +49-40-78105-0

Web: <http://www.albis.com/>

Availability: Algeria, Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tunisia, Turkey, United Kingdom

#### Nexeo Plastics

Telephone: 833-446-3936

Web: <https://www.nexeoplastics.com/>

Availability: North America

#### Plastic Service Centers

Telephone: 586-307-3900

Web: <http://www.plasticservice.com/>

Availability: North America

#### Ultrapolymers

*Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.*

Telephone: +32-11-57-95-57

Web: <http://www.ultrapolymers.com/>

Availability: Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Macedonia, Netherlands, Norway, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom

