

# Purell HP548N

Improved rigidity for healthcare applications



LyondellBasell has extended its *Purell* product range for healthcare applications with the new grade *Purell* HP548N, which outperforms standard polypropylene grades by offering improved stiffness. This property is highly appreciated by customers when rigidity is required in applications for pharmacy, healthcare, laboratory and diagnostics segments.

*Purell* HP548N is an ideal homopolymer for injection molding technology, exhibiting good rheological properties, nucleation and antistatic addition. This new grade offers an optimized balance between fluidity, stiffness and crystallization behavior, which provides advantages during processing.

### Features and Benefits

- | Good stiffness
- | Faster crystallization kinetics
- | Improved cycle time
- | Long term antistatic behavior
- | Good flowability
- | Good aesthetics
- | Complies with certain EP monographs and USP tests applicable to plastic materials (in progress). For more information please refer to our company Product Stewardship Bulletin (PSB)

### Some typical applications

- | Vials
- | Pill strips
- | Medical devices
- | Syringe plungers
- | Rigid containers

The *Purell* family of grades offers industry-defining products based on LyondellBasell's pioneering resin and manufacturing technology developments.

Typical Properties	Method	Value	Unit
MFR (@ 230°C/2.16kg)	ISO 1133	11	g/10min
Modulus of Elasticity	ISO 527	1700	MPa
Charpy notch. 23°C	ISO 179	2.5	kJ/m <sup>2</sup>
HDT (0.46N)	ISO 75-2	95	°C

Note: Typical properties, not to be considered as specifications

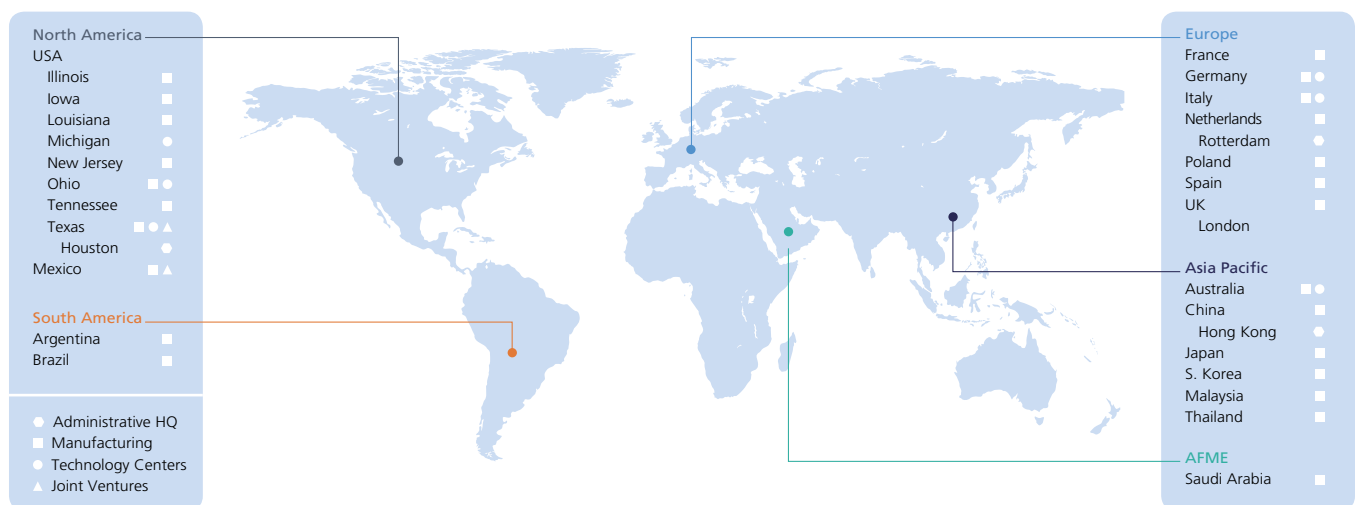
Before using a product sold by a company of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally. SELLER MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT. This product(s) may not be used in: (i) any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I Medical Devices, without prior notification to Seller for each specific product and application; or (ii) the manufacture of any of the following, without prior written approval by Seller for each specific product and application: (1) U.S. FDA Class II, Health Canada Class II or Class III, and/or European Union Class II Medical Devices; (2) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned Medical Devices; (3) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration; (4) tobacco related products and applications; (5) electronic cigarettes and similar devices; and (6) pressure pipe or fittings that are considered a part or component of a nuclear reactor. (iii) Additionally, the product(s) may not be used in: (1) U.S. FDA Class III, Health Canada Class IV, and/or European Class III Medical Devices; (2) applications involving permanent implantation into the body; (3) life-sustaining medical applications; and (4) lead, asbestos or MTBE related applications. All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification. Users should review the applicable Material Safety Data Sheet before handling the product.

# About LyondellBasell

LyondellBasell is one of the world's largest plastics, chemical and refining companies. We are the largest producer of polypropylene and polypropylene compounds; a leading producer of propylene oxide, polyethylene, ethylene and propylene; a global leader in polyolefins technology; and a producer of refined products, including biofuels.

LyondellBasell products and technologies are used to make items that improve the quality of life for people around the world including packaging, electronics, automotive components, home furnishings, construction materials and biofuels.

## Global Reach



Owned and operated by LyondellBasell, its subsidiaries and/or joint ventures

## Our Product Lines And The End Markets We Serve...

<p><b>Olefins &amp; Polyolefins</b>              – Americas              – Europe, Asia &amp; International</p>  <p><b>Key Products</b></p> <ul style="list-style-type: none"> <li>Ethylene</li> <li>Propylene</li> <li>Polyethylene</li> <li>Polypropylene</li> <li>Catalloy Process Resins</li> <li>Polypropylene Compounds</li> <li>Polybutene-1</li> </ul> <p><b>End Uses</b></p> <ul style="list-style-type: none"> <li>• Food Packaging</li> <li>• Textiles</li> <li>• Automotive</li> <li>• Appliances</li> <li>• Films</li> <li>• Flexible Piping</li> </ul>	<p><b>Intermediates &amp; Derivatives</b></p>  <p><b>Key Products</b></p> <ul style="list-style-type: none"> <li>Propylene Oxide</li> <li>Styrene Monomer</li> <li>PG and PGE</li> <li>Acetyls</li> <li>Oxyfuels</li> <li>Ethylene Oxide</li> <li>EG and EOD</li> </ul> <p><b>End Uses</b></p> <ul style="list-style-type: none"> <li>• Insulation</li> <li>• Home Furnishings</li> <li>• Adhesives</li> <li>• Consumer Products</li> <li>• Coatings</li> </ul>	<p><b>Refining</b></p>  <p><b>Key Products</b></p> <ul style="list-style-type: none"> <li>Gasoline</li> <li>Diesel</li> <li>Olefins Feed</li> </ul> <p><b>End Uses</b></p> <ul style="list-style-type: none"> <li>• Automotive Fuels</li> <li>• Aviation Fuels</li> <li>• Heating Oil</li> <li>• Industrial Engine Lube Oils</li> </ul>	<p><b>Technology</b></p>  <p><b>Key Products</b></p> <ul style="list-style-type: none"> <li>Process Licensing</li> <li>Catalyst Sales</li> <li>Technology Services</li> </ul> <p><b>End Uses</b></p> <ul style="list-style-type: none"> <li>• Polyolefin and Chemical Manufacturing Processes</li> </ul>
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