

Purell: Trusted solutions for everyday healthcare



The changing landscape of healthcare

An industry supplier for decades, LYB has evolved to meet the ever-changing needs of the dynamic healthcare market. With industry-leading expertise, LYB is uniquely positioned to support our customers through current and future market dynamics:



Safety more important than ever

- Increasing health and safety standards
- Risk management, minimizing potential errors

Changing demographic landscape

- Growth in aging and overweight population
- Increasing prevalence of chronic diseases, such as diabetes

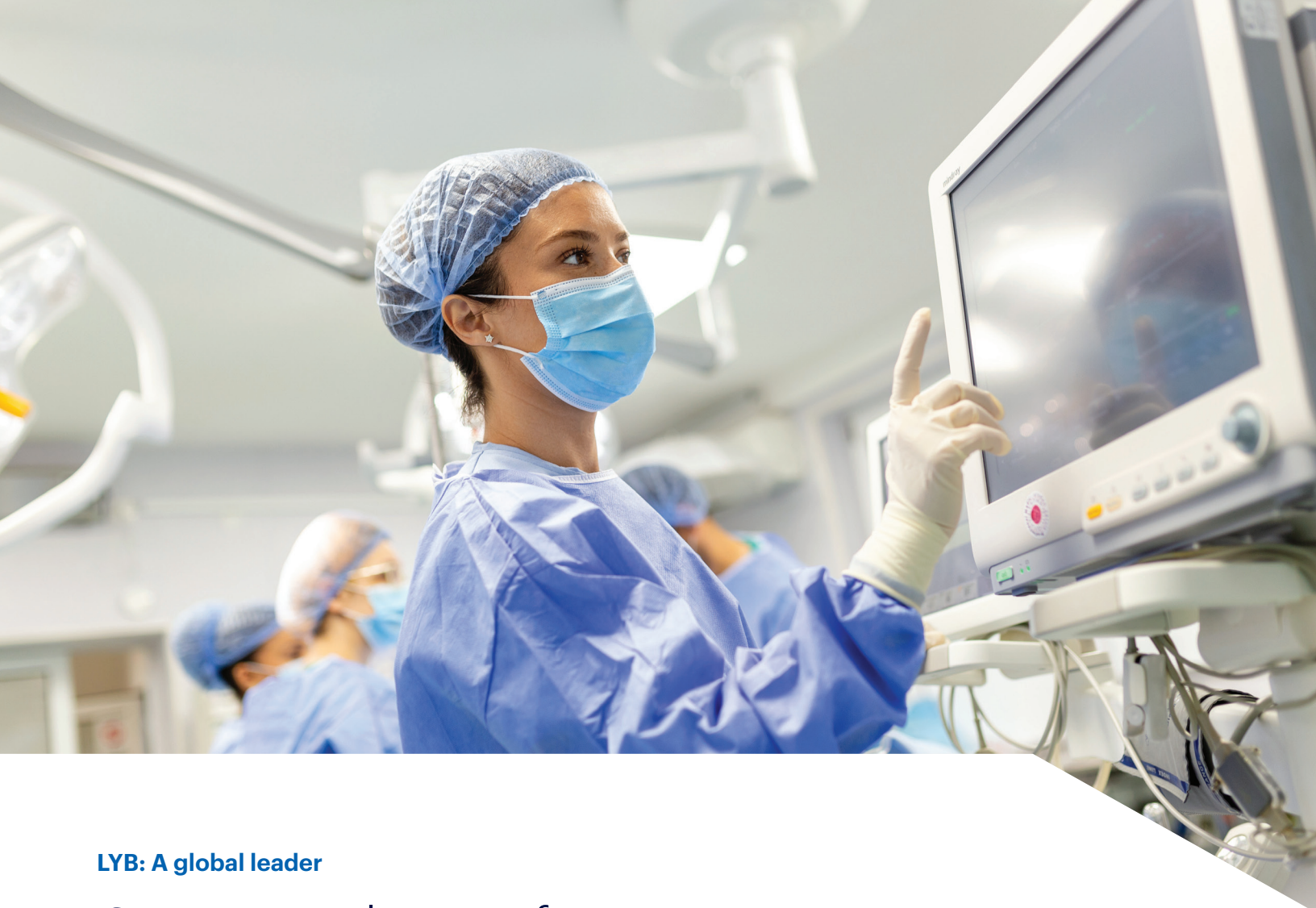
Innovations in wellness

- Weight loss drugs driving new consumer habits
- Ease of use, such as pre-filled/single dose syringes and wearable medical devices

Growing demand for sustainable and circular solutions

- Growing need for lower-carbon solutions
- Material replacement to improve recyclability





LYB: A global leader

Creating solutions for
everyday sustainable living



100+

countries where our products are sold



20

countries with manufacturing sites and JVs



~20,300¹

employees globally

#1

producer of polypropylene
in **North America**

#1

largest producer of polyethylene
and polypropylene in **Europe**

¹ Full-time and part-time employees as of December 31, 2024

Global experience, local support

The *Purell* portfolio from LYB has been an enabler for the healthcare and pharmaceutical industry for decades.

As an early pioneer in polymers for the healthcare sector, LYB is proud to build upon a strong industry reputation of product quality, regulatory compliance and technical service. Global production assets and a broad international technical team ensure that our solutions continue to provide customers with application insight and reliable supply.

Innovation is the foundation of the *Purell* portfolio. We are constantly exploring new ways to enhance product performance, processability and reliability to meet the evolving needs of our customers. Through close collaboration and technical expertise, we help enable the development of high-quality applications in healthcare, packaging and beyond.



Let's find the
right solution for
your healthcare
application.



The *Purell* service concept



Manufacturing and logistics

- Consistency of formulation
- Dedicated manufacturing and quality management procedures
- Dedicated cleaning procedures for silos, trucks, railcars and containers
- Customer-specific supply solutions
- Pest control



Regulations

- Meet EU Pharmacopeia, with a Drug Master File (DMF) listing
- Meet US Pharmacopeia, with a Drug Master File (DMF) listing
- Reference to ICH Harmonized Guideline Q3D covered in regulatory documents
- Long-term sample and documentation retention



Support

- Effective risk management procedures
- Minimum 2-year notification of change
- Global asset base
- Dedicated local sales and technical service teams in all regions of the world
- Access to over 40 years of application innovation in the industry
- Plant audits

Note: Information related to relevant regulatory subjects is available in the Product Stewardship Bulletin (PSB) on the website <https://productsafety.lyondellbasell.com/>



Explore our expanding *Purell* portfolio



Medical devices

Syringes & assembly, medical device components, labware & PPE

Unlock the future of care with *Purell* polymers for medical devices. Versatile and adaptable, these products can be used across a broad range of applications including syringes, rigid device components and labware. Backed by our leading *Purell* service protocol, these products enable our customers to meet the strict industry demands and regulatory requirements of the MedTech sector.

Polyethylene

Healthcare grade	Product family	Example applications	Melt index (g/10min)	Density (g/cm³)	Conversion technology					
					IM	BM	Extrusion	USP	DMF	Sterilization
<i>Purell</i> PE5618	High density	Medical devices	18	0.956	●			(*)	●	EO
<i>Purell</i> PE5307	High density	Medical devices	6.90	0.953	●			(*)	●	EO
<i>Purell</i> PE1840H	Low density	Medical devices	1.50	0.919	●	●	●	●	●	EO
<i>Purell</i> PE3020D	Low density	Medical devices	0.30	0.927	●	●	●	●	●	EO
<i>Purell</i> PE3220D	Low density	Medical devices	0.40	0.930	●	●	●	●	●	EO

Polypropylene

Healthcare grade	Product family	Example applications	Melt flow rate (g/10min)	Flexural modulus (MPa)	Conversion technology					
					IM	BM	Extrusion	USP	DMF	Sterilization
<i>Purell</i> PD702	Homopolymer	Syringes, medical devices; labware	35	1170	●			●	●	AC, EO
<i>Purell</i> HP6331	Homopolymer	Medical devices; labware	12	1450	●		●	(*)	●	AC, EO
<i>Purell</i> PF511	Homopolymer	Syringes, labware; medical devices	20	930	●			●	●	Rad, AC, EO
<i>Purell</i> PF531	Homopolymer	Syringes, labware; medical devices	27	965	●			●	●	Rad, AC, EO
<i>Purell</i> HP6523	Homopolymer	Medical devices; labware	4	1380	●		●	(*)	●	AC, EO
<i>Purell</i> EP494T	Impact copolymer	Medical devices	50	1170	●			(*)	●	AC, EO
<i>Purell</i> SR549M	Random copolymer	Labware	11	1030	●		●	●	●	AC, EO

Note: Information related to relevant regulatory subjects is available in the Product Stewardship Bulletin (PSB) on the website <https://productsafety.lyondellbasell.com/>

(*) Pending, please contact your LYB representative for more information.

Explore our expanding *Purell* portfolio



Healthcare packaging

Immediate pharmaceutical packaging, caps & closures

Purell polymers for healthcare packaging ensure our customers can meet stringent demands for consistent quality, sterility and regulatory compliance. Our broad range of solutions support effective packaging of pharmaceuticals and devices whether in rigid containers or in blow-fill-seal (BFS) bottles and ampoules.

Polyethylene

Healthcare grade	Product family	Example applications	Melt index (g/10min)	Density (g/cm³)	Conversion technology					
					IM	IBM	BM	USP	DMF	Sterilization
Purell PE53003	High density	Bottles and vials	0.38	0.953			●	●	●	EO
Purell PE53003Z	High density	Bottles and vials	0.38	0.953		●	●	●	●	EO
Purell PE5307	High density	Rigid packaging	6.90	0.953	●			(*)	●	EO
Purell PE3020D	Low density	IV bottles, ophthalmic ampoules	0.30	0.927	●		●	●	●	EO
Purell PE1840H	Low density	IV bottles, ophthalmic ampoules	1.50	0.919	●		●	●	●	EO
Purell PE3220D	Low density	IV bottles, ophthalmic ampoules	0.40	0.930	●		●	●	●	EO

Polypropylene

Healthcare grade	Product family	Example applications	Melt flow rate (g/10min)	Flexural modulus (MPa)	Conversion technology					
					IM	IBM	BM	USP	DMF	Sterilization
Purell HP6331	Homopolymer	Caps & closures	12	1450	●			(*)	●	AC, EO
Purell SR549M	Random copolymer	Caps & closures; clear containers	11	1030	●	●		●	●	AC, EO
Purell RP491S	Random copolymer	Containers	35	930	●			(*)	●	AC, EO

(*) Pending, please contact your LYB representative for more information.

For more information, please refer to the Product Stewardship Bulletin (PSB) of the product on the website <https://productsafety.lyondellbasell.com/> Purell polypropylene resins Melt Index, Melt Flow Rate, Density and Flexural Modulus values are referenced from Technical Data Sheets and should not be considered specifications.

IM = Injection Molding

BM = Blow molding

IBM = Injection blow molding

EO = Ethylene Oxide

AC = Autoclave

Rad = Raditation

About us

We are LyondellBasell (LYB) – a leader in the global chemical industry creating solutions for everyday sustainable living. Through advanced technology and focused investments, we are enabling a circular and low carbon economy. Across all we do, we aim to unlock value for our customers, investors and society. As one of the world's largest producers of polymers and a leader in polyolefin technologies, we develop, manufacture and market high-quality and innovative products for applications ranging from sustainable transportation and food safety to clean water and quality healthcare. For more information, please visit www.lyb.com or follow [@LyondellBasell](https://www.linkedin.com/company/lyondellbasell) on LinkedIn.

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