



Summary Data Sheet

Bormed™ solutions for healthcare applications

Keep Discovering

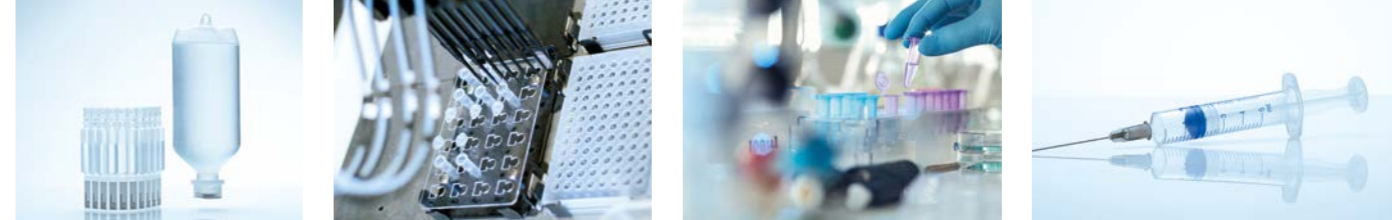
 BOREALIS

بروج
Borouge



Bormed™ products

Dedicated polyolefins for healthcare applications



Type: PP	Grade	MFR 230 °C / 2.16 kg [g/10 min] ISO 1133	Flexural Modulus [MPa] ISO 178	Charpy notched impact 23 °C [kJ / m²] ISO 179/1eA	Melting point [°C] DSC	Special Features	European Pharmacopeia*	United States Pharmacopeia*	ISO 10993*	DMF nr.	Blow-Fill-Seal (BFS) / Extrusion Blow Moulding (EBM)	Injection / Injection Stretch Blow Moulding (IBM / ISBM)	Injection Moulding (IM)	Film
Homopolymer	DM55pharm	2.8	1,400	3.5	164		✓	✓	*	009146			•	•
Homopolymer	HD800CF	8	1,600	3.0	164		✓	✓	✓	020240			•	•
Homopolymer	HD850MO	8	1,850	3.0	162		✓	✓	✓	017929			•	•
Homopolymer	HD810MO	10	1,250	4.5	164	Nu, Rad	*	✓	✓	009040			•	•
Homopolymer	HF840MO	19	1,250	3.0	160	Slip	✓	✓	✓	009040			•	•
Homopolymer	HG820MO	28	1,800	2.0	162	Nu	*	✓	✓	027799			•	•
Random Copolymer	RB801CF	1.9	750	7.9	140		✓	✓		028484	•	•		•
Random Copolymer	RD804CF	8	1,000	4.0	150		✓	✓		028486		•	•	•
Random Copolymer	RD808CF	8	700	6.0	140		✓	✓		028487		•	•	•
Random Copolymer	RD834CF	8	1,000	4.0	150	AB, Slip	✓	✓		031866				•
Random Copolymer	RE816CF	11	800	5.0	145	AB	✓	✓		028485				•
Random Copolymer	RF825MO	20	1,100	6.0	150	Nu	*	✓	✓	031607			•	•
Random Copolymer	RF830MO	20	1,100	5.0	150	Nu, Rad	*	✓	✓	031609			•	•
Random Copolymer	RG835MO	30	1,200	5.0	150	Nu, Slip	*	✓	✓	031608			•	•
Random Copolymer	RJ880MO	45	950	5.5	150	Nu, AS	*	✓	✓	027840			•	•
Heterophasic Copolymer	BJ868MO	70	1,500	5.5	165		*	✓	✓	033438			•	•
Random-Heterophasic Copolymer / Soft PP	SB815MO	1.5	425	80.0	145		✓	✓	✓	027540	•	•	•	•
Random-Heterophasic Copolymer / Soft PP	SC820CF	3.9	550	12.0	141		✓	✓	*	020243			•	•
Random-Heterophasic Copolymer / Soft PP	SC876CF	3.8	330	77.0	148		✓	✓	*	027916				•
Terpolymer	TD109CF	6	700	4.0	131		✓	✓	*	024931			•	•

Type: PE	Grade	MFR 190 °C / 2.16 kg [g/10 min] ISO 1133	Density [kg/m³] ISO 1183	Flexural Modulus [MPa] ISO 178	Melting point [°C] DSC	Special Features	European Pharmacopeia	United States Pharmacopeia	ISO 10993	DMF nr.	Blow-Fill-Seal (BFS) / Extrusion Blow Moulding (EBM)	Injection / Injection Stretch Blow Moulding (IBM / ISBM)	Injection Moulding (IM)	Film
HDPE	HE2581-PH	0.3	958	1,400	131		✓	✓	✓	027656	•	•	•	
HDPE	HE7541-PH	4	954	1,250	129		✓	✓	✓	027654			•	
HDPE	HE9621-PH	12	964	1,300	133		✓	✓	✓	029149			•	
LDPE	LE6607-PH	0.3	927	270	115	No additives	✓	✓	*	008124/027108	•	•		•
LDPE	LE6609-PH	0.3	930	300	117	No additives	✓	✓	*	017927/028752	•	•		•
LDPE	LE6600-PH	1.5	919	170	110	No additives	✓	✓	*	027587	•	•		•

Type: Plastomers

Plastomer	PL8830-PH	1.1	883	23	73		*	✓	✓	033070				•
-----------	-----------	-----	-----	----	----	--	---	---	---	--------	--	--	--	---

All figures are typical values – data should not be used for specification work

Key:

AB: Anti-block
Nu: Nucleation
AS: Anti-static

Rad: Radiation package
Slip: Slip agent

✓ Grade has been tested. For detailed information please refer to medical compliance statement on www.borealisgroup.com

• Main application
• Secondary application

* For more information, please refer to the respective medical statement at borealisgroup.com

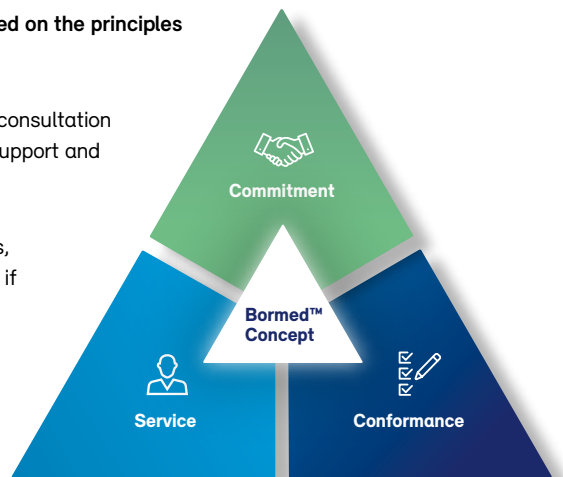
The Bormed™ Concept

With over 35 years of experience in the healthcare industry, Borealis Bormed™ is founded on the principles of service, commitment and conformance – Because we care.

Service: Get specialised project support from start to finish, including one-to-one expert consultation and unrivalled access to data that goes beyond product data sheet. By providing global support and thorough market understanding, we help you answer any challenge.

Commitment: Address your sustainability challenges and work towards long term success, with our grades remaining unchanged. While we are committed to the grades as they are, if they require changing, we will provide up to five years' availability.

Conformance: Conform and adapt to current and future regulatory requirements around the world with Bormed. This safeguards your investment and enables significant cost savings over a project's lifetime, offering you independent pharmacopeia and ISO10993 analysis reports, and extractable testing data.



The Bormed Concept delivers

- Consistency of product recipe via rigorous change control procedure
- Bormed Directive: Operating instructions for the development, production, storage and delivery to the end customer of Bormed
- Continuity of supply to mitigate the risk of a change during your product life cycle: In case of change, product made available up to 5 years (2 years pre-notification and a last call volume combined with 3-year shelf life)
- Pharmacopeia compliance: Regular external testing of Ph. Eur., USP and ISO 10993 – analysis reports can be shared upon request; US DMF listing; following VDI 2017 guideline on "Medical Grade Plastics"
- Externally tested extractable profiles that can be shared upon request (under NDA) and can support your E&L testing programme
- Specific technical support given during the project development phase
- Moldflow data and other rheological characteristics
- Globally active dedicated team of experienced technical and regulatory specialists
- Bormed InCompounds: For tailor-made, customised solutions by partnering with trusted and recognised healthcare compounders (at present Avient, MELITEK, MOCOM and Wittenburg Group)

Embrace circularity

Bornewables™ & Borcycle™ C

Meet your sustainability targets with ISCC Plus-certified polyolefins produced from renewable or chemically recycled feedstocks. The Bornewables™ and Borcycle™ C offer the same material performance and regulatory compliance as virgin Bormed medical grades.



The Bornewables

The Bornewables offer circular Bormed polyolefins with a reduced carbon footprint and are produced with renewable feedstock derived entirely from waste and residue streams.



Borcycle C

Borcycle C is the chemically recycled line of Bormed and renews plastic back to plastic, giving polyolefin-based, post-consumer waste another life.

About Borealis Borealis is one of the world's leading providers of advanced and circular polyolefin solutions and a European market leader in base chemicals, fertilizers and the mechanical recycling of plastics. We leverage our polymers expertise and decades of experience to offer value adding, innovative and circular material solutions for key industries. In re-inventing for more sustainable living, we build on our commitment to safety, our people and excellence as we accelerate the transformation to a circular economy and expand our geographical footprint.

With head offices in Vienna, Austria, Borealis employs 6,900 employees and operates in over 120 countries. In 2021, Borealis generated total sales and other income of EUR 10,153 million and a net profit of EUR 1,396 million. OMY, the Austria-based international oil and gas company, owns 75% of Borealis, while the remaining 25% is owned by a holding company of the Abu-Dhabi based Mubadala. We supply services and products to customers around the globe through Borealis and two important joint ventures: Borouge (with the Abu Dhabi National Oil Company, or ADNOC, based in UAE), and Baystar™ (with TotalEnergies, based in the US).

www.borealisgroup.com | www.borealiseverminds.com

Disclaimer The information contained herein is to our knowledge accurate and reliable as of the date of publication. Borealis and Borouge extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the consequences of its use or for any errors. It is the customer's responsibility to inspect and test our products in order to satisfy himself as to the suitability of the products for the customer's particular purpose. The customer is also responsible for the appropriate, safe and legal use, processing and handling of our products. Nothing herein shall constitute any warranty (express or implied, of merchantability, fitness for a particular purpose, compliance with performance indicators, conformity to samples or models, non-infringement or otherwise), nor is protection from any law or patent to be inferred. Insofar as products supplied by Borealis and Borouge are used in conjunction with third-party materials, it is the responsibility of the customer to obtain all necessary information relating to the third-party materials and ensure that Borealis and Borouge products, when used together with these materials, are suitable for the customer's particular purpose.

No liability can be accepted in respect of the use of Borealis and Borouge products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.

Bormed, Bornewables and Borcycle are trademarks of Borealis AG.

Borealis AG

Trabrennstraße 6-8, A-1020 Vienna, Austria
Tel +43 1 22 400 000, Fax +43 1 22 400 333
borealisgroup.com



BOREALIS

بروج
Borouge

