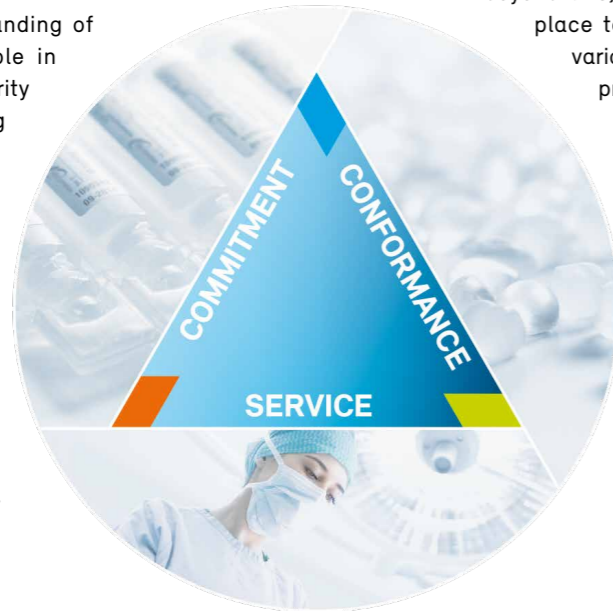


## The Bormed™ Concept

We understand that in the healthcare market, safety and efficiency of the product matters most, so you need the right partner to do business with in a reliable and meaningful way. We achieve this through our dedicated, constantly developing range of polyethylene and polypropylene grades, our global team and, critically, the Bormed concept. This is more than simply documentation and technical service, rather it is all encompassing – from product conception to production, procurement, support and distribution. It is based on the three core principles of service, commitment and conformance which cover the different aspects of active information management, change control and security of supply. Additionally, through our technical expertise and an ongoing, clear dialogue with our business partners, we remain at the forefront of healthcare trends and challenges allowing us to evolve our Bormed offering with the industry, providing tailored healthcare solutions for you. Because we care.

### Commitment

Our commitment to and understanding of the healthcare market is tangible in everything we do. We provide security of supply, for the short and long term, with higher stock levels and planning prioritisation. We seek out cooperation with our business partners, the OEMs, converters and machinery suppliers. We believe in consistency – combined with step change innovation which we drive at our state of the art facility in Linz, Austria. Experience, technical expertise and a forward looking attitude make us the right partner for the healthcare market.



### Service

It is important to have the right material and the right information at the right time in the right place. To achieve this, we steer information and notifications proactively, aiming to provide you with what you need to know, when you need it, in a concise and structured format. We lead open discussions with our business partners which enables us to remain at the forefront of industry trends and challenges. Through our dedicated global team of specialists, from R&D to technical support to sales and extensive dedicated distribution networks, we are able to provide fast and reliable delivery.

### Conformance

Borealis' expertise results in a maintained consistency of the variables used to make polyolefins for the healthcare market – safeguarding continued regulatory compliance, be it the European or US Pharmacopeia, or ISO standards. Going beyond this, we have dedicated procedures in place to avoid uncontrolled changes and variations in quality. Our change control procedure ensures the highest quality standards. This goes hand in hand with enhanced operating instructions, which ensure that anyone involved in Bormed, knows Bormed – from product development to production, supply chain and support functions.

Borealis and Borouge are leading providers of innovative plastics solutions that create value for society. Building on their proprietary Borstar® and Borlink™ technologies and 50 years of experience in polyolefins, Borealis and Borouge support key industries including **infrastructure, automotive and advanced packaging**. Their manufacturing capacity reaches over 5.4 million tonnes of polyethylene and polypropylene per year. Borealis is headquartered in Vienna, Austria, and operates in over 120 countries with around 6,400 employees worldwide. Borouge, its joint venture with the Abu Dhabi National Oil Company (ADNOC), employs approximately 3,000 people, has customers in more than 50 countries and its headquarters are in Abu Dhabi in the UAE and Singapore. Together, both companies provide services and products to customers around the world. Borealis offers a wide range of base chemicals, including melamine, phenol, acetone, ethylene, propylene, butadiene and pygas, servicing a wide range of industries. Together with Borouge the two companies will produce approximately 6 million tonnes of Base Chemicals in 2014. Borealis also creates real value for the agricultural industry with a large portfolio of fertilizers. The company distributes approximately 2.1 million tonnes per year. This volume will increase to more than 5 million tonnes by the end of 2014. Borealis and Borouge proactively benefit society by taking on today's challenges and are working to drive ideas forward. Both companies are committed to the principles of Responsible Care®, driving improved safety performance within the chemical industry and contributing to addressing the world's water and sanitation challenges through product innovation and their Water for the World™ programme. For more information visit: [www.borealisgroup.com](http://www.borealisgroup.com), [www.borouge.com](http://www.borouge.com), [www.waterfortheworld.net](http://www.waterfortheworld.net)

Borstar is a registered trademark of the Borealis Group. Borlink and Water for the World are trademarks of the Borealis Group.

### For more information:

visit [www.borealisgroup.com](http://www.borealisgroup.com), [www.borouge.com](http://www.borouge.com) and [www.borealisbecausewecare.com](http://www.borealisbecausewecare.com)

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 **BOREALIS**

  
بروج  
**Borouge**

# Solutions for Healthcare Applications

## Summary Data Sheet



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**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.	Extrusion Blow Moulding (EBM)	Injection / Injection Stretch Blow Moulding (IBM / ISBM)	Injection Moulding (IM)	Film
Homopolymer	DM55pharm	2.8	1,350	4.0	164		✓	✓	✓	9146			•	•
Homopolymer	HD800CF	8	1,400	4.3	164		✓	✓	-	20240			•	•
Homopolymer	HD850MO	8	1,850	5.5	162		✓	✓	✓	17929			•	•
Homopolymer	HD810MO	10	1,250	4.5	164	Nu, Rad	-	✓	✓	9040			•	•
Homopolymer	HF840MO	19	1,250	3.5	160	Slip	-	✓	✓	9040			•	•
Homopolymer	HG820MO	28	1,900	1.8	162	Nu	-	✓	✓	27799			•	•
Homopolymer	HJ875MO	75	1,600	1.8	160		✓	✓	✓	*			•	•
Block Copolymer	BE860MO	13	1,400	8.0	164		✓	✓	✓	17930			•	•
Random Copolymer	RB845MO	1.9	1,100	7.0	145		✓	✓	-	17931	•	•	•	•
Random Copolymer	RB801CF-01	1.9	750	11.0	140		✓	✓	-	16484	•	•	•	•
Random Copolymer	RD804CF	8	1,000	4.8	151		✓	✓	-	24930		•	•	•
Random Copolymer	RD808CF	8	700	9.0	140		✓	✓	-	20244		•	•	•
Random Copolymer	RE816CF	11	800	5,5	145	AB	✓	✓	-	28485				•
Random Copolymer	RF825MO	20	1,100	6.0	150	Nu	-	✓	✓	12123			•	•
Random Copolymer	RF830MO	20	1,100	6.0	150	Nu, Rad	-	✓	✓	12123			•	•
Random Copolymer	RG835MO	30	1,200	6.0	150	Nu, Slip	-	✓	✓	12123			•	•
Random Copolymer	RJ880MO	46	1,050	5.0	150	Nu, AB	✓	✓	-	27840			•	•
Terpolymer	TD109CF	6	700		131		✓	✓	-	24931			•	•
Random-Heterophasic Copolymer / Soft PP	SB815MO	1.5	425	80.0	145		✓	✓	✓	27540	•	•	•	•
Random-Heterophasic Copolymer / Soft PP	SC820CF	3.9	550	26.0	141		✓	✓	-	27540			•	•
Random-Heterophasic Copolymer / Soft PP	SC876CF	3.8	330	77	149		✓	✓	-	27916				•

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.	Extrusion Blow Moulding (EBM)	Injection / Injection Stretch Blow Moulding (IBM / ISBM)	Injection Moulding (IM)	Film
HDPE	HE2581-PH	0.3	958	1,250	131		✓	✓	✓	18041/27656	•	•	•	
HDPE	HE7541-PH	4	954	950	129		✓	✓	✓	18351/27654			•	
HDPE	HE9621-PH	12	962	1,300	133		✓	✓	✓	18040/*			•	
LDPE	LE6607-PH	0.3	927	290	114		✓	✓	-	8124/27108	•			
LDPE	LE6609-PH	0.3	930	330	117		✓	✓	-	17927	•	•		
LDPE	LE6600-PH	1.5	919	250	110		✓	✓	-	27587	•	•		

Type: PO	Grade	MFR 230 °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.	Extrusion Blow Moulding (EBM)	Injection / Injection Stretch Blow Moulding (IBM / ISBM)	Injection Moulding (IM)	Film
PO Specialty	WD170CF <sup>1</sup>	6.5	910	800	151		✓	✓	-	20242				•
PO Specialty	WE150CF <sup>1</sup>	12.5	925	1,000	151	Slip, AB	-	✓	-					•

**Key:**  
 AB: Antiblock  
 Nu: Nucleation  
 All figures are typical values – data should not be used for specification work

Rad: Radiation package  
 Slip: Contains slip agent  
<http://www.borealisgroup.com/e-services/datasheet/>

# Please refer to medical compliance statement on

• Main application  
 • Secondary application

\* in preparation  
<sup>1</sup> WD170CF and WE150CF are not Bormed™ branded  
 - test not performed

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