





### **About Us**

Borouge is a leading provider of innovative, value creating plastics solutions. A joint venture between the Abu Dhabi National Oil Company (ADNOC), one of the world's major oil and gas companies, and Austria based Borealis, a leading provider of chemical and innovative plastics solutions, Borouge is a groundbreaking international partnership at the forefront of the next generation of plastics innovation.

Borouge has its headquarters in the United Arab Emirates and Singapore, employs approximately 1,600 people representing more than 40 nationalities and serves customers in more than 50 countries across the Middle East. Asia-Pacific. Indian sub-continent and Africa.

Building on Borealis' unique Borstar® technology and experience in polyolefins for more than 50 years, Borouge provides innovative, value creating plastics solutions for the infrastructure (pipe systems, and power and communication cables), automotive and advanced packaging markets.

In 2010, Borouge tripled its annual production capacity in Abu Dhabi to 2 million tonnes and an additional 2.5 million tonnes per year is scheduled for completion by the end of 2013 to create the world's largest integrated polyolefins plant. Borouge is also investing in plants and logistics hubs in Asia and an Innovation Centre in Abu Dhabi. Today Borouge and Borealis manufacture over 5.4 million tonnes of polyethylene and polypropylene annually. Focused on Value Creation through Innovation they ensure that their customers throughout the value chain, around the world, can always rely on superior products and security of supply.

Borouge is committed to the principles of Responsible Care® and together with Borealis proactively contributes towards addressing the world's water and sanitation challenges through their Water for the World™ initiative.

Visit www.borouge.com and see how we are Shaping the Future with Plastics.

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#### Disclaimer

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### For more information:

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# Borstar® Polypropylene, Polyethylene moulding and thermoforming applications









## Moulding

Product name	MFF			d /	Applica	tion			Sub-S	Segme	nt		Conv	ersion	Ke	y perf	orman	се			Pro	perties	5			Example
	230°0 2.16 g 10mi	g/ (MPa	us Impa ) (kJ/m RT	1 <sup>2</sup> )	Caps & Closures	Appliances Rottles Containers	Houseware	Thin wall packaging	Standardised closures	Custorniseu ciosures Pails	Small appliances	White goods	Injection Moulding	Blow Moulding	Stiffness	Impact strength	Controlled torque	Fast cycle	Transparency	Heat resistance	Antistatic agent	Borealis Nucleation Technology	Nucleating agent	Lubricant	Controlled rheology	
PP Homopolymers																										
HD120MO	8	1500			•		•						•													Kitchenware
HE125MO	12	1550			•		•		•				•		•											Houseware, closures
HG385MO	25	1750			•		•		•				•		•	•	•	•		•	•	•		•	•	Hinge caps, thick houseware parts
HJ325MO	50						•	•					•		•			•			•		•		•	DVD boxes, thin wall packaging
PP Heterophasic Cop	olymers (I																									
BC960MO	4	1150		3 •	)	•				•	•		•			•		•			•	•				Large pallets, battery housing, appliance needing impact
BD950MO	7	1400			•				•				•	•	)	•	•	•			•	•		•		Caps for CSD, water, juices
BE961MO	12	1200	14	•	)	•		•		•			•			•						•				Crates, trays, boxes, pails, high impact
Bormod™ BF970MO	20			•	)	•	•	•		•			•		•			•		•	•	•				Crates, trays, boxes, pails, parts requiring creep performance
Borcom™ BG055AI	22					•					•	•	•		•					•			•			Aesthetic small appliance and white goods parts
Bormod™ BH975MO	38	1450	8			•	•	•		•	•	•	•					•			•	•				Washing machine tubs, pails, houseware
Bormod™ BJ368MO	70	1450	5.5				•	•					•		•	•		•			•	•				Tubs, long flow length houseware, ice cream container
PP Random Copolym	iers																									
RB307MO	1.5		20PE	3		•								•		•			•				•			Cosmetic, detergent bottles, highly transparent containers
RG460MO	30	1050			•		•	•	•				•						•		•		•		•	Hinge caps, overcaps, transparent boxes, food container, media case
RJ470MO	70	1200	5				•	•					•		•			•	•		•		•		•	Thin wall transparent houseware, boxes, food container, media case
Product name	MFR		Density	Appli	ication	Sub-	Segme	nt C	Conver	sion	Key	perfor	manc	e Pro	opertie	es	Examp									
<b>HDPE</b> Borpure <sup>™</sup> MB6561	190°C/ N 2.16 g/ 10min	Modulus (MPa)	955	Caps & Closures	Bottles, Containers		Standardised Closures		Injection Moulding	Compression Moulding	Stiffness	ESCR	Controlled torque	Fast cycle	Lubricant		Organo	leptic	closur	es for	miner	ral water	r, tea, CS	SD		
Borpure <sup>™</sup> MB6562	1.5	950	955														Organo						, ιου, οι			
BB2581	0.3	1350	958		•		•		•	,			•		•		-						ar house	shold i	ndue+r	al chemicals and food
DDZ301	0.3	1330	330		9				•								Domes	vviti i i	iigi i Ec	CITTE	quirei	Hellis I	Ji House	o IOIU I	nuusti	ai dicitiidas atu 1000

### **Sheet and Thermoforming**

Product name	oduct name MFR Flexural Melting 230°C/ Modulus range °C			Conversion				Application				Key performance						ties		Example			
	230°C/ 2.16 g/ 10min	Modulus (MPa)	s range °C	СРР	Blow Film (air cooled)	Thermoforming	Sheet	Lamination	Food Packaging	Labels Freezer Packacino	Bubble Stability	High Clarity	Stiffness	Sealability	Retort	Sterilisable	Borealis Nucleation Technology	Nucleating agent	Stearate				
<b>PP</b> Homopolymers																							
HC205TF	4	1700	166			•	•		•			•	•				•		•	)	High clarity and glossy trays, cups and container		
PP Heterophasic Co	polymers	(Block Co	polymers)																				
Borpact™ BC918CF	3	1400	166	•	•	•	•	•	•	• •	•	•	•	•	•	•	•	•	•	)	Stand up pouches (easy tear), Coextrusion, MAP/ vegetable trays, Food packaging, Lamination/ Labelling film		
PP Random Copoly	mers																						
Borclear™ RB707CF	1.5	800	145		•	•		•	•	• •	•	•		•	•	•		•	•	)	Food and high clarity packaging film, FFS, Sealing layer in Coextrusion, Lamination/Textile films		