

BNM Group / BNM Petroleum

Technical Reference Sheet

Material	HDPE	Document ID	TR-BOROUGE-HDPE-BB2588
Grade	Borstar BB2588	Date Generated	2026-09-11
Reference Producer	Borouge	Producer Country	United Arab Emirates

1. Reference Scope

This Technical Reference Sheet provides technical properties for **HDPE**, grade/designation **Borstar BB2588**, as referenced from the official producer source cited below. It is intended for commercial pre-qualification and technical comparison only.

Reference Producer: Borouge | **Producer Grade:** Borstar BB2588

2. Application

A multimodal, high-molecular-weight HDPE resin for small-part blow moulding of containers up to about 10 litres (e.g. household/chemical/cosmetic containers, small non-pressure pipe applications).

3. Technical Properties

Property	Value	Unit	Test Method	Condition	Source Page
Density	958.0	kg/m3	ISO 1183-1	—	1 (single-page PDS)
Melt flow rate	0.22	g/10min	ISO 1133-1	190°C/2.16 kg	1 (single-page PDS)
Melt flow rate	0.90	g/10min	ISO 1133-1	190°C/5 kg	1 (single-page PDS)
Melt flow rate	23.0	g/10min	ISO 1133-1	190°C/21.6 kg	1 (single-page PDS)
Flexural modulus	1400	MPa	ISO 178	23°C/24h conditioning (as stated on datasheet)	1 (single-page PDS)
Izod impact resistance, notched	159	J/m	ASTM D256	23°C	1 (single-page PDS)
Charpy/Izod impact strength, notched	29	kJ/m2	ISO 180	23°C	1 (single-page PDS)
Melting temperature	132	°C	ISO 11357-3	—	1 (single-page PDS)
Crystallisation temperature	117	°C	ISO 11357-3	—	1 (single-page PDS)
Vicat softening temperature A50	127	°C	ISO 306	10 N	1 (single-page PDS)
Tensile modulus	1300	MPa	ISO 527-2	—	1 (single-page PDS)
Tensile strain at yield	8	%	ISO 527-2	50 mm/min	1 (single-page PDS)
Tensile stress at yield	30	MPa	ISO 527-2	50 mm/min	1 (single-page PDS)
ESCR	≥1000	f50/h	ASTM D2561	10% 2mm	1 (single-page PDS)
ESCR	≥500	f50/h	ASTM D1693-B	10% 2mm	1 (single-page PDS)
Shore hardness D	66	-	ISO 868	1s	1 (single-page PDS)
Charpy impact strength, notched	12	kJ/m2	ISO 179-1	23°C	1 (single-page PDS)

4. Processing / Handling Notes

Parameter	Value	Unit	Notes	Source Page
Barrel temperature	170-190	°C	typical blow moulding processing range	1 (single-page PDS)
Die temperature	175-190	°C	—	1 (single-page PDS)
Melt temperature	170-200	°C	—	1 (single-page PDS)

5. Commercial / Technical Notes

- Datasheet states product should be stored in dry conditions at temperatures below 50°C and protected from UV-light.
- Some values on the source datasheet may carry a 'not to be used for specification work' asterisk that was not individually captured per row -- recommend re-checking against the PDF directly before quoting a value contractually.
- exact_grade_match set false: BNM's catalogue need is family-level HDPE across Film/Pipe/Blow/Injection, while BB2588 is one representative grade for small-part blow moulding only.

6. Restrictions / Source Notes

- Not intended to be used for medical, pharmaceutical or healthcare applications.

7. Source Attribution

Official Source URL	https://www.borealisgroup.com/storage/Datasheets/BB2588-PDS-REG_WORLD-EN-V6-PDS-WORLD-60483-PDS_BORSTAR-BB2588_6_09072024.pdf
Source Document Title	Borstar BB2588 - Product Data Sheet
Source Revision	Ed.6
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Source Document Type	Product Data Sheet (PDS)
Source Verified	Yes
Exact Grade Match	No

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8. BNM Disclaimer

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