

Borouge® BB2581

BB2581 is a high-density polyethylene intended for blow molding of products with high stiffness and very good environmental stress crack resistance (ESCR). BB2581 is recommended for household and industrial chemicals such as detergents, cleaners, and motor oils while being recommended for bottles and containers up to 10 liters.

Physical Properties	Metric	English	Comments
Density	0.958 g/cc	0.0346 lb/in ³	ISO 1183

ESCR 10% Igepal®	>= 100 hour	>= 100 hour	ASTM D1693
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Melt Flow	0.40 g/10 min @Load 2.16 kg, Temperature 190 °C	0.40 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133
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	1.8 g/10 min @Load 5.00 kg, Temperature 190 °C	1.8 g/10 min @Load 11.0 lb, Temperature 374 °F	ISO 1133
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High Load Melt Index	28 g/10 min @Load 21.6 kg, Temperature 190 °C	28 g/10 min @Load 47.6 lb, Temperature 374 °F	ISO 1133
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Mechanical Properties	Metric	English	Comments
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Hardness, Shore D	66	66	ISO 868
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Tensile Strength, Yield	30.00 MPa	4351 psi	At 50 mm/min; ISO 527-2
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Elongation at Yield	8.0 %	8.0 %	At 50 mm/min; ISO 527-2
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Tensile Modulus	1.30 GPa	189 ksi	At 1 mm/min; ISO 527-2
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Flexural Modulus	1.35 GPa	196 ksi	At 1 mm/min; ISO 178
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Thermal Properties	Metric	English	Comments
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Deflection Temperature at 0.46 MPa (66 psi)	80.0 °C	176 °F	ISO 75-2
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Processing Properties	Metric	English	Comments
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Front Barrel Temperature	170 - 190 °C	338 - 374 °F	
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Die Temperature	175 - 190 °C	347 - 374 °F	
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