



► **Blow Molding Guide Polyolefins**
Braskem Europe

Braskem

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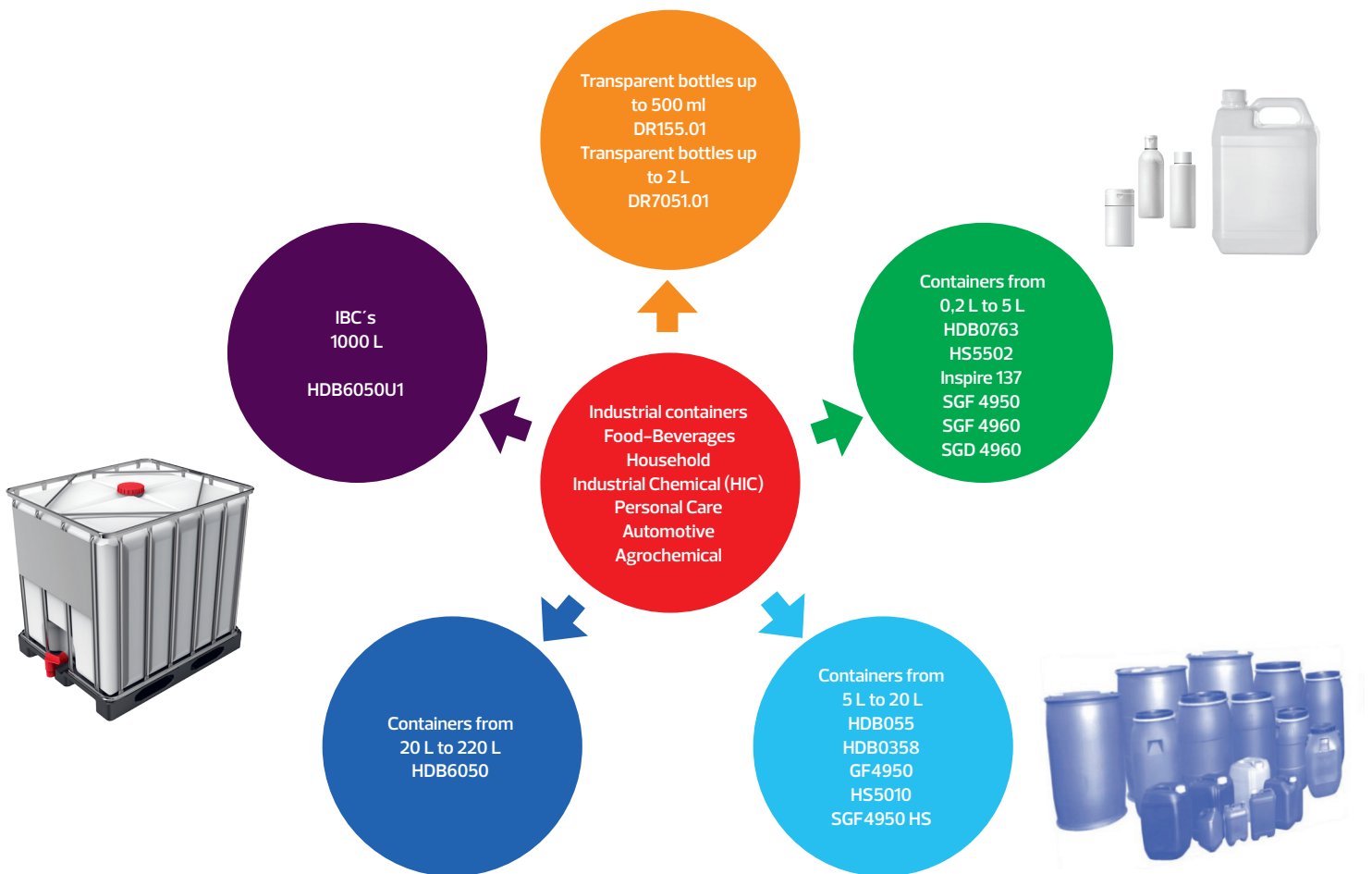
Braskem targets development partnerships with our clients that enable them to meet and exceed evolving and stringent market demands.

Polyolefin resins can be used for blow molding processing. Some of the potential applications that blow molding resins can be used for include

- Small part blow moulded bottles e.g. personal care
- Cans
- Blow moulded containers
- industrial bulk containers

Benefits in these applications are light weight, low energy consumption and efficient processability therefore reduce costs. Further benefits are outstanding chemical resistance, good stiffness/toughness balance and high melt strength.

► Applications

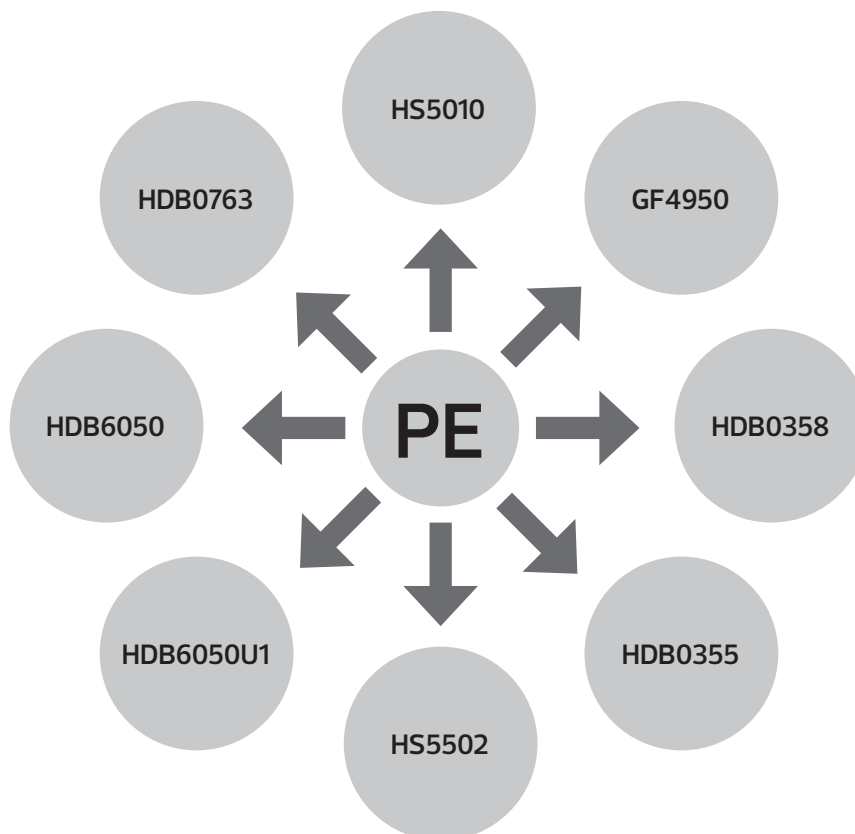


► PE – Performance and Portfolio

Performance

Grade	Density	High Load Melt Index 190°C; 21,6 kg	Flexural Modulus; Secant 1% Method	Strenght at yield	Notched Izod @ 23 °C	ESCR 100 % Igepal, 50 °C
ASTM METHOD	D 792	D 1238	D 790	D 638	D 256	D 1693
Units	[kg/m ³]	[g/10min]	[MPa]	[MPa]	[J/m]	[h]
HS5010	948	10	1150	25	500	>1000
	Low temperature impact resistance					
HDB6050U1	948	6	1133	26	500	>1000
	Excellent processability, outstanding ESCR, UV stabilized					
HDB6050	950	5	1240	28	500	>1000
	Excellent processability, outstanding ESCR					
HS5502	954	32	1350	30	250	20
	Good processability, bottles produced have excellent stiffness					
HDB0355	955	32	1408	30	0,16	36
	Offers good combination of high top load strenght and ESCR					
GF4950	956	28	1350	30	150	70
	Bimodal grade, good balance between impact and stiffness					
HDB0358	958	26	1500	30	140	>1400
	Bimodal grade, outstanding stiffness and ESCR					
HDB0763	963	55	1661	33	105	11
	Extremely low odor in finished container					

Portfolio



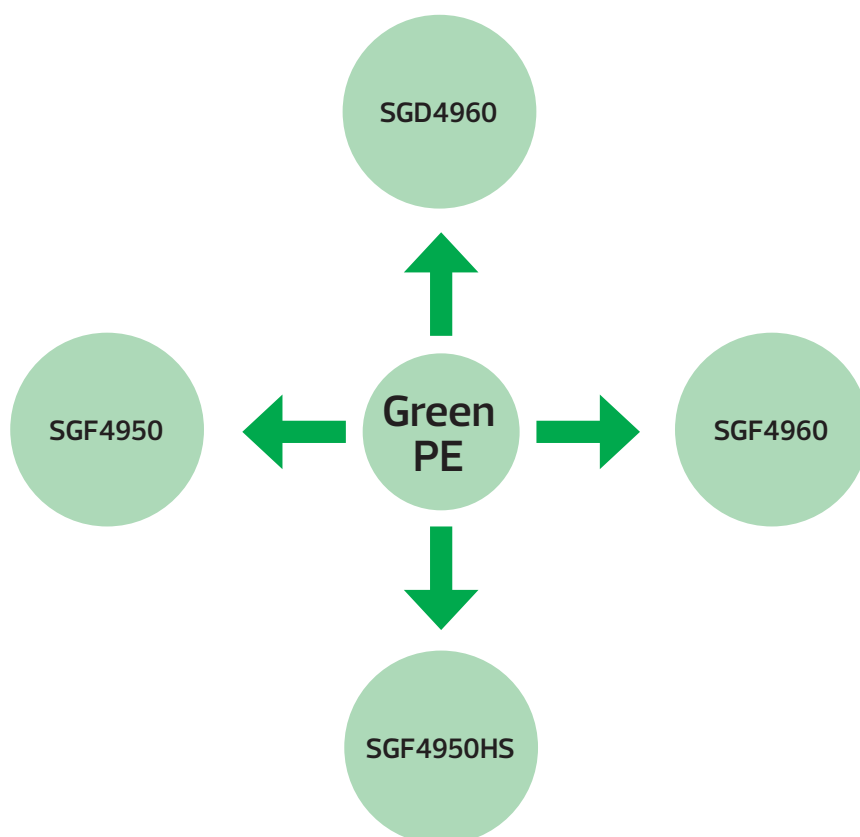
► Green PE – Performance and Portfolio

Performance

Grade	Density	High Load Melt Index 190°C; 21,6 kg	Flexural Modulus; Secant 1% Method	Strenght at yield	Notched Izod @ 23 °C	ESCR 100 % Igepal, 50 °C
ASTM METHOD	D 792	D 1238	D 790	D 638	D 256	D 1693
Units	[kg/m ³]	[g/10min]	[MPa]	[MPa]	[J/m]	[h]
SGF4950HS	951	20	1100	30	175	>1000
	Low temperature impact resistance					
SGF4950	956	28	1350	30	150	70
	Excellent processability, outstanding ESCR, UV stabilized					
SGD4960	961	50	1600	32	89	24
	Good processability, bottles produced have excellent stiffness					
SGF4960	962	28	1400	30	225	25
	Excellent processability, outstanding ESCR					



Portfolio

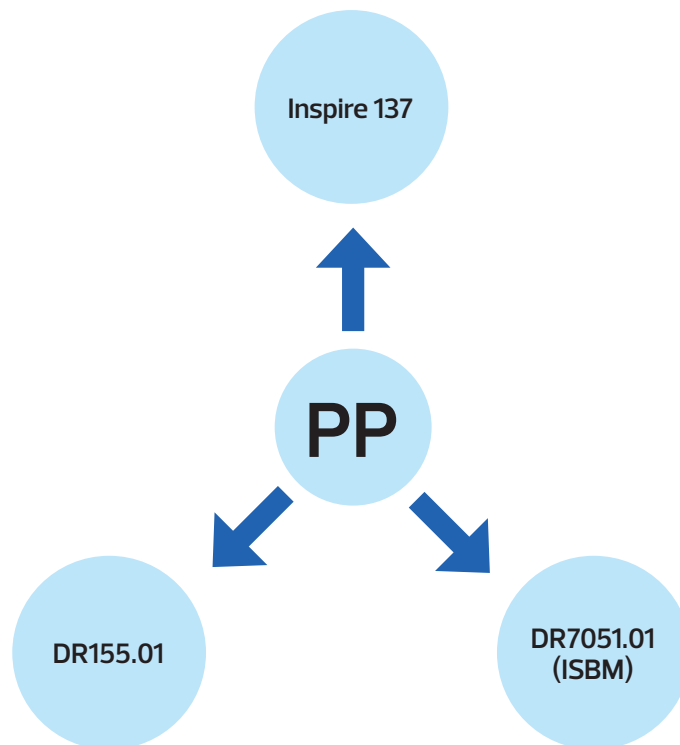


► PP – Performance and Portfolio

Performance

Grade	MFR	Density	Flexural Modulus	Tensile Stress	Tensile Strain	Charpy Notched Impact Strength (23 °C)	Charpy Notched Impact Strength (-20 °C)	Heat Deflection Temperature–under load 0,45 MPa	Haze (39,4) mil (1000µm)	
METHOD	ISO 1133	ISO 1183	ISO 178	ISO 527-2	ISO 527-2	ISO 179-1/1eA	ISO 179-1/1eA	ISO 75-2/B	ASTM D1003	
Units	[g/10min]	[kg/m ³]	[MPa]	[MPa]	[%]	[kJ/m ²]	[kJ/m ²]	[°C]	[%]	
Inspire 137	ICP	0,8	900	1000	25	12	40	3	74	-
		High impact performance, also at minus temperatures								
DR155.01		1,7	900	900	30	12	22	-	80	12
		Good processing, excellent mechanical property balance and high clarity								
DR7051.01	RCP	10	900	1200	28	12	6	-	85	8
		A random copolymer for injection stretch blow molding applications. Good mechanical property balance, excellent optical properties, good processability								

Portfolio



► Reliable, Responsive Service and Supply

We focus on being responsive to our European customers' needs with service levels and supply security unmatched by the competition. At the heart of this responsiveness is geographic diversity that provides reliable sourcing, with production facilities in Germany, Brazil, US and Mexico.

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