



**Housewares,
Furniture and Toys**

Technical Reading Guidelines

PP

- HOMO** Homopolymer
- RACO** Random Copolymer
- HECO** Heterophasic Copolymer

PE

- HDPE** High-Density Polyethylene
- LDPE** Low-Density Polyethylene
- LLDPE** Linear Low-Density Polyethylene
- mLLDPE** Linear Low-Density Polyethylene produced with metallocene catalyst

The information contained herein is provided in good faith, indicating typical values obtained in our laboratories, and should not be considered as absolute or as a guarantee.

Only the properties and values listed on the quality certificate should be considered as product guarantees.

The values in this catalog may be changed without prior notice by Braskem.

Braskem does not recommend the use of its products for storage or contact with parenteral solutions, except where explicitly indicated.

In case of doubt regarding usage or to discuss other applications, please contact the Technical Services and Development team.



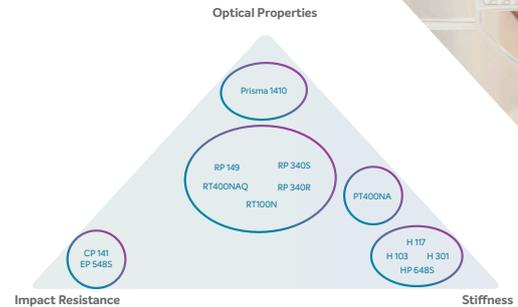
Housewares PP Applications

Braskem offers a wide range of products for houseware applications, enabling excellent processing, outstanding mechanical and optical properties, and great flexibility for innovative design.

We offer high-flow products that provide:

- Optimized cycle time;
- Flexibility in part design.

Additionally, transparent products are more suitable for use in food storage containers and organizers. Braskem's polypropylene also features good mechanical properties, ensuring the durability of finished parts.



Family	Method ASTM	Melt Flow Rate (230 °C / 2,16 kg)	Flexural Modulus 1% Secant	Notched Izod Impact Strength at 23°C	Deflec on Temperature under Load (0,455 MPa)	Opacity	Applications
		D 1238	D 790A	D 256A	D 648	D 1003	
	Units	g/10 min	MPa	J / m	°C	%	
Homo	H 117	45	1.700	20	123	–	Thin-wall injection, fast cycle, and high stiffness.
	HP 648S	40	1.400	20	110	–	Injection for thin-wall housewares.
	PT 400NA	40	1.600	20	117	24	Injection for thin-wall housewares with good transparency, fast cycle, and high stiffness.
	H 103	40	1.200	20	98	–	General-purpose injection.
	H 301	10	1.350	25	103	–	General-purpose injection for parts requiring lower flow.
Heco	EP 548S	44	1.250	75	108	–	Injection of thin-wall parts, fast cycle, low taste and odor transfer, with good impact resistance.
	CP 141	43	1.200	95	110	–	Injection of thin-wall parts with fast cycle and good impact resistance.
Raco	RP 149	87	950	40	75	19	Ultra-high flow injection for high-transparency, thin-wall, fast-cycle parts.
	RP 340S	45	1.050	40	81	18	Injection of high-transparency, thin-wall parts with low odor and taste transfer.
	RT 400NAQ	40	1.050	40	83	18	Injection of high-transparency, thin-wall parts.
	RP 340R	25	1.000	50	78	17	Injection of high-transparency parts with low odor and taste transfer.
	RT 100N	10	950	55	80	16	Injection of high-transparency parts requiring lower flow.
Prisma	Prisma 1410	40	1.000	50	81	8	Injection of ultra-transparent parts with excellent processability, high productivity, and excellent stiffness/impact balance.

Family	Method ASTM	Melt Flow Rate (230°C / 2,16kg)	PCR Content	Raw Material Source	Color	Applications
PP 	Method ASTM	D 1238	–			
	Units	g/10 min	%			
	RPP 237 BK6	24	60%	Post-Consumer Recycled Waste.	Black	Injection Molding for Housewares.
	RPP237 WE6	24	60%	Post-Consumer Recycled Waste.	White	Injection Molding for Housewares.
	DPR 010AW	50	100%	Post-Consumer Recycled Waste.	White	Injection Molding for Housewares.
DPR 013AW	35	90%	Post-Consumer Recycled Waste.	Black	Injection Molding for Housewares.	

Houseware Caps PE

Braskem offers a wide range of LDPE and LLDPE products for large flat-area caps used in plastic, glass, or metal housewares.

		Melt Flow Rate (190 °C / 2,16 kg)	Density	Flexural Modulus 1% Secant	Notched Izod Impact Strength at 23°C	Deflec on Temperature under Load (0,455 MPa)	Applications
Family	Method ASTM	D 1238	D 1505/D 792	D 790A	D 256A	D 648	
	Units	g/10 min	g/cm ³	MPa	J / m	°C	
LDPE	PB 208	22	0,923	250	NB	42	Caps, flexible injected parts, large flat-area caps.
	PB 608	30	0,915	200	NB	43	Caps, flexible injected parts, large flat-area caps.
mLLDPE	M 2520	25	0,919	332	NB	45	Caps, flexible injected parts, large flat-area caps.
LLDPE	IC 32	29	0,924	350	NB	45	Caps, flexible injected parts, large flat-area caps.
	IF 33	48	0,931	450	60	52	Caps, flexible injected parts, large flat-area caps.
	IN 34	48	0,938	700	40	53	Caps, flexible injected parts, large flat-area caps.

		Melt Flow Rate (190°C/2,16 Kg)	Density	Minimum C14 content	Applications
Method ASTM		D 1238	D 792	D 6866	
Units		g/10 min	g/cm ³	%	
PEBD 	SPB208	22	0,923 ^{a)}	95	PE I'm green™ bio-based (sourced from sugarcane). Caps, flexible injected parts, large flat-area caps.
		Masterbatches, injection of parts with large flat areas and caps.			
	SPB608	30	0,915 ^{a)}	95	PE I'm green™ bio-based (sourced from sugarcane). Caps, flexible injected parts, large flat-area caps.
		Masterbatches, injection of parts with large flat areas and caps.			

Test specimens molded by compression according to ASTM D4703. a) Value obtained by ASTM D1505.



Furniture

We also offer a portfolio developed for the furniture segment:

Design furniture, outdoor furniture, and children's furniture and chairs.

These products enable converters to meet certification requirements in accordance with Inmetro standards.



Family		Melt Flow Rate (230°C / 2,16kg)	Flexural Modulus 1% Secant	Notched Izod Impact Strength at 23°C	Description	Process
HECO	Method ASTM	D 1238	D 790A	D 256A		
	Units	g/10 min	MPa	J/m		
	CP 442XP	6	1100	170	Medium melt flow index, with excellent stiffness/impact balance. Excellent surface finish and good processability. Suitable for furniture components requiring good mechanical strength.	Injection
HOMO	KM 6150HC	4	1.700	40	KM 6150HC is a medium-flow homopolymer with superior mechanical properties compared to conventional homopolymers, it offers excellent stiffness and a well-balanced property profile. Recommended for use in standardized chairs and their components.	Injection
	H 301	10	1.350	25	Medium melt flow index and additivated for general-purpose use. It is suitable for injection molding processes, offering excellent processability and a good stiffness/impact balance.	Injection.

Family		Melt Flow Rate (190°C / 2,16kg)	Density	Weather Stabilization	Description	Process
LLDPE	Method ASTM	D 1238	D 1505 / D 792	-		
	Units	g/10 min	g/cm ³	-		
	ML 3400N	5,5	0,935	UV8	General-purpose rotomolded parts for furniture, toys, and automotive applications. Offers good surface finish, excellent processability, low warpage, and stabilization against heat and UV radiation.	Rotomolding

Toys

Braskem offers a wide range of products for toy applications, including light and heavy childcare items. We provide high-flow products with excellent impact resistance, enabling greater quality and durability.

Family		Melt Flo Rate (230°C / 2,16kg)	Flexural Modulus 1% Secant	Notched Izod Impact Strength at 23°C	Description	Process
HOMO	Method ASTM	D 1238	D 790A	D 256A		
	Units	g/10 min	MPa	J/m		
	H 503	3,5	1300	30	Low melt flow index, additivated for general purpose use. Offers a good stiffness/impact balance and low odor and taste transfer.	Injection
	H 103	40	1200	20	High melt flow index, providing excellent processability and a good stiffness/impact balance.	Injection
HECO	H 107	80	1550	20	Very high melt flow index, ensuring excellent processability. Recommended for thin-wall parts.	Injection
	CP 442XP	6	1100	170	Medium melt flow index, with excellent stiffness/impact balance. Good surface finish, and good processability.	Injection
	CP 241	20	900	150	High melt flow index, with special rheology. This resin offers excellent processability and productivity, with a good stiffness/impact balance.	Injection
RACO	CP 141	43	1200	95	High melt flow index, specially designed to provide high productivity (fast cycle). This resin offers great processability and an excellent stiffness/impact balance.	Injection
	RP 340R	25	1000	50	High flow, offering excellent processability, great transparency, good stiffness/impact balance, and very low odor and taste transfer.	Injection

Family		Melt Flow Rate (190°C / 2,16kg)	Density	Weather Stabilization	Description	Process
LLDPE	Method ASTM	D 1238	D 1505 / D 792	-		
	Units	g/10 min	g/cm ³	-		
LLDPE	ML 3400N	5,5	0,935	UV8	General-purpose rotomolded parts for furniture, toys, and automotive applications. Offers good surface finish, excellent processability, low warpage, and stabilization against heat and UV radiation.	Rotomolding PE
HDPE	HS 5502	0,35	0,954	-	HDPE Copolymer for blow-molded parts. Provides excellent processability, stiffness, and impact resistance.	Blow Molding PE



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