PP & PE for Caps & Closures

Braskem

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Innovation is the tool that drives us in the pursuit of our long-term commitments with sustainable development

Our purpose is to improve people's lives by creating sustainable solutions through chemicals and plastics.

In line with the **UN 2030 sustainable development goals**, Braskem took on long-term goals with people and the planet in 2020. Working in three priority and four complementary dimensions, we are looking to achieve these goals through innovation.

Eliminating plastic waste

Mitigating Climate Change

Social Responsibility & Human Rights

An **ecosystem** developed to represent Braskem's **products, technologies** and **initiatives** that **help drive the circular economy**.

A portfolio of products **made from sugarcane** that **captures CO_2** from cradle-to-gate, helping **mitigate climate change.**

All our polypropylene grades are available with **ISCC+ certification**, using the **mass balance method with bio, circular or bio-circular feedstocks***, ensuring sustainability and traceability across the supply chain.

Caps & Closures

Braskem's **PP and PE resins are designed for** high-performance caps and closures across **beverage, food, personal care, and household applications**. Developed to meet key functional requirements such as dimensional stability, hinge durability, and organoleptic performance, our materials offer efficient solutions for injection and compression molding—**enabling lighter, more convenient packaging.** Braskem's comprehensive portfolio helps customers develop innovative, cost-effective closures with reliable processing and consistent quality, **creating value throughout the entire supply chain**.

*www.iscc-system.org/certification/iscc-documents/iscc-material-lists/

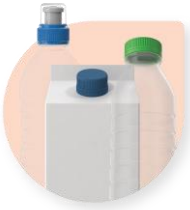
Food Packaging Applications

Carbonated Soft Drinks

Braskem's resins for CSD caps are formulated to withstand high internal pressure and ensure secure sealing, supporting both injection and compression molding to enable design flexibility and processing efficiency.

Mineral Water

To meet strict organoleptic standards, Braskem offers high-purity resins with low migration potential, developed using advanced technology to prevent taste, odor, or color changes - earning trust from the most demanding mineral water brands.



Beverages

Braskem provides versatile resin solutions for a wide range of beverage applications, from dairy and juices to hot-filled teas and energy drinks. Our materials support high processing efficiency and design adaptability, helping customers meet performance, safety, and shelf-life requirements.

Food

Braskem's polyethylene and polypropylene resins offer excellent safety, compatibility, and performance for food applications, including complex closures like large flat-area and bicomponent caps, supporting regulatory compliance and consumer confidence.

Non-Food Packaging Applications

Personal Care

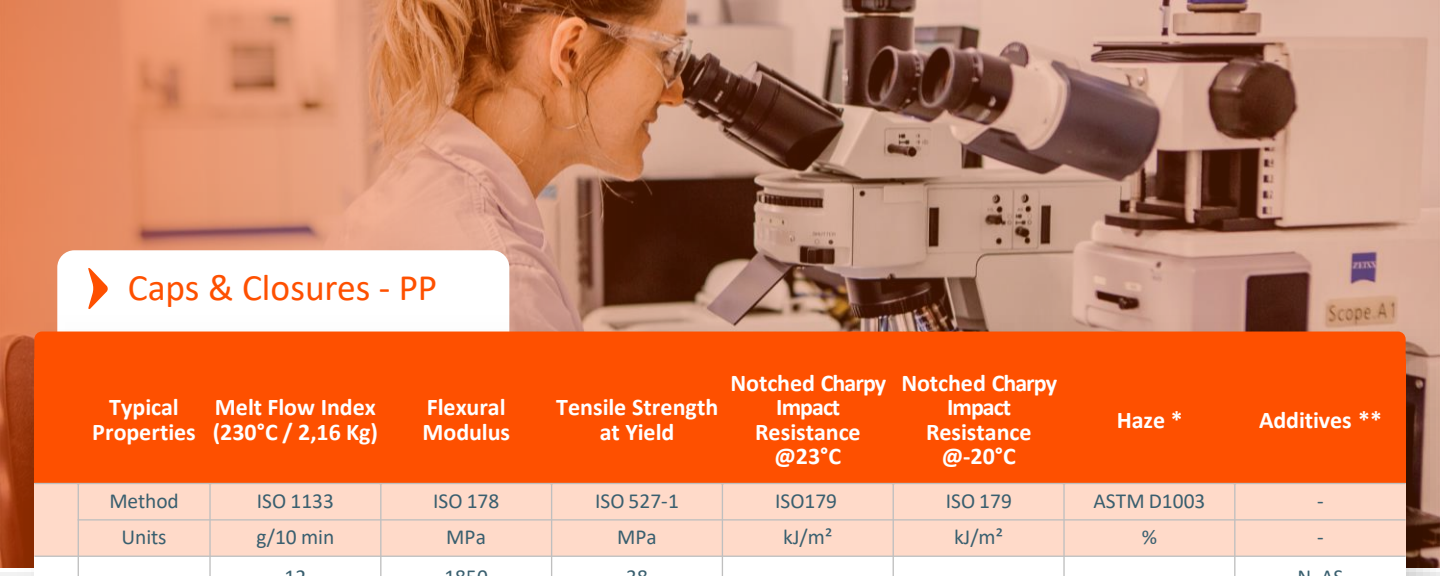
Braskem delivers polypropylene resins with excellent surface finish, transparency, and gloss, ideal for visually appealing personal care caps such as flip-tops and disk-tops. Our materials ensure design flexibility, aesthetic quality, and reliable molding performance.

Home Care

Braskem's polyethylene and polypropylene resins offer high chemical resistance, dimensional stability, and processing efficiency for home care closures like flip-top, push-pull, and threaded caps - supporting durable, user-friendly packaging across diverse formulations and shelf lives.

Industrial Use

For demanding industrial applications, Braskem's resins provide mechanical strength, chemical resistance, and tight sealing performance to meet rigorous safety standards. Our low-density polyethylene solutions enable the flexibility needed for retractable and specialty closures.



Caps & Closures - PP

	Typical Properties	Melt Flow Index (230°C / 2,16 Kg)	Flexural Modulus	Tensile Strength at Yield	Notched Charpy Impact Resistance @23°C	Notched Charpy Impact Resistance @-20°C	Haze *	Additives **
	Method	ISO 1133	ISO 178	ISO 527-1	ISO179	ISO 179	ASTM D1003	-
	Units	g/10 min	MPa	MPa	kJ/m²	kJ/m²	%	-
Homo	FT120WV	12	1850	38	-	-	-	N, AS
		Flip-top caps, excellent dimensional properties						
	HSP250NA	25	1650	36	3	-	-	N, AS
		Caps for general use						
	H7058-25R	25	1400	33	3	-	-	CR
		Caps for general use, narrow MWD						
	DH789.01	50	1700	37	2,5	-	-	N, AS
		Thin wall caps, fast cycle						
	H734-52RNA2	52	1800	37	2,5	-	-	N, AS, CR
		Thin wall caps, fast cycle, narrow MWD						
Random	RSP100NA	10	1200	28	6	-	8	N, AS
		High transparency injection molded caps, flip-top						
	RSP230NA	23	1200	29	5	-	8	N, AS
		High transparency injection molded caps, flip-top						
	Inspire® 364	42	1050	27	5,5	-	8	N, AS
		High transparency and thin wall injection molded caps						
	Inspire® 382	70	1050	27	5	-	10	N, AS
		High transparency and thin wall injection molded caps						
	RSP1000NAR	100	1050	27	4,5	-	9	N, AS, CR
		High transparency and thin wall injection molded caps						
ICP	EP445L	6	1600	30	7,2	3,3	-	N, AS, S, CR
		Caps for carbonated soft drinks, water, juices						
	C706-21NAHP	21	1500	27	8	4,5	-	N, AS
		Injection molded caps for general use, with thin wall, fast cycle and excellent stiffness						
	C7082-30NA	30	1400	25	8,5	4	-	N, AS
		Injection molded caps for general use, with thin wall and fast cycle						
	C705-44NAHP	44	1500	28	7	4	-	N, AS
		Injection molded caps for general use, with thin wall and fast cycle						
	CD700NAQ	70	1200	24,5	8	3,5	-	N, AS, CR
		Injection molded caps for general use, with thin wall and fast cycle, large flat area thin wall, excellent dimensional stability, narrow MWD						
	CG700NA	70	1350	23,5	6	3,5	-	N, AS
		Injection molded caps for general use, with thin wall and fast cycle, large flat area thin wall, excellent dimensional stability						
	C7069-100NA	100	1500	28	4	2,5	-	N, AS
		Injection molded caps for general use, with thin wall and fast cycle, large flat area thin wall, excellent dimensional stability						

*Injection molded specimen according to ISO 294. **Additives: N = Nucleated/Clarified, AS = Antistatic, CR = Controlled Rheology; S = Slip Agent

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Caps & Closures - PE*

	Typical Properties	Melt Flow Index (230°C / 2,16 Kg)	Density	Additives**
	Method	ASTM D1238	ASTM D792 / D1505	-
	Units	g/10 min	g/cm³	-
HDPE	HD6401H	0,8	0,955	S
		Carbonated soft drinks		
	Bio-based SGE7252NS	2	0,952	-
		Beverage bottle caps		
	HC7260	7,2	0,959	-
		Still water, edible oil		
	Bio-based SHC7260	7,2	0,959	-
		Still water, edible oil		
	HDI2061	20	0,955	-
		Large flat caps, spouts		
	HA7260	20	0.955	-
		Large flat caps, spouts		
	Bio-based SHA7260	20	0,955	-
		Large flat caps, spouts		
LDPE	BC818	8.3	0,918	-
		General use, bung		
	Bio-based SBC818	8.3	0,918	-
		General use, bung		
	LDI2020	20	0,920	-
		General use, bung		
	Bio-based SPB208	22	0,923	-
		Large flat caps, snap lids		
	Bio-based SPB608	30	0,915	-
		Large flat caps, snap lids		
LLDPE	IF33	48	0,931	-
		Edible oil, home and personal care, bungs		

*All PE grades are subject to availability. **Additives: S = Slip Agent

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Global Presence

With a global, human-oriented vision of the future, Braskem strives every day to improve people's lives by creating sustainable solutions in chemistry and plastics. Braskem is the largest producer of thermoplastic resins in the Americas and a global leader in the production of biopolymers on an industrial scale.

Our products are exported to some 70 countries and we count on 40 Industrial units, located in Brazil, the United States, Germany and Mexico (in partnership with Mexican company Idesa). For more information, visit www.Braskem.com.

Clients in more than **70** countries

More than **8.500** team members

6th largest producer in PE, PP and PVC

- #1 producer PE, PP and PVC in the Americas
- #1 PP producer in North America
- #1 PE, PP and PVC producer in Latin America

40 industrial units:

- 29 plants
- 4 plants
- 5 plants
- 2 plants

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