



# Polypropylene for Automotive and Compounding

DRIVING NEW LEVELS OF  
**PERFORMANCE AND INNOVATION**

Braskem 



## Surpassing Industry Standards with **High Performance, Sustainable Polypropylene**

Braskem's broad polypropylene (PP) portfolio meets the needs of today's sophisticated automotive and compounding applications. Benefits from the proven performance that helps our customers add value to a wide range of innovative downstream solutions include:

- Reduced wall thickness enables using less raw material in achieving lightweighting solutions that lower transportation costs, improve fuel economy, and reduce emissions.
- Unique balance of stiffness, toughness, and flowability offer exceptional competitive advantages for multiple end users.
- Joint technology and innovation platforms that enable our clients to meet and exceed stringent market demands.





*We are developing the next generation of performance PP that exploits recent advances in catalyst and process technology, combined with polymer science and engineering innovation.*

## Accelerating **Innovation** and **Speed to Market**

Multiple technologically integrated centers in the United States, Brazil and Germany employ more than 300 specialized professionals who collaborate with clients on joint product and applications development.

These state-of-the-art facilities feature:

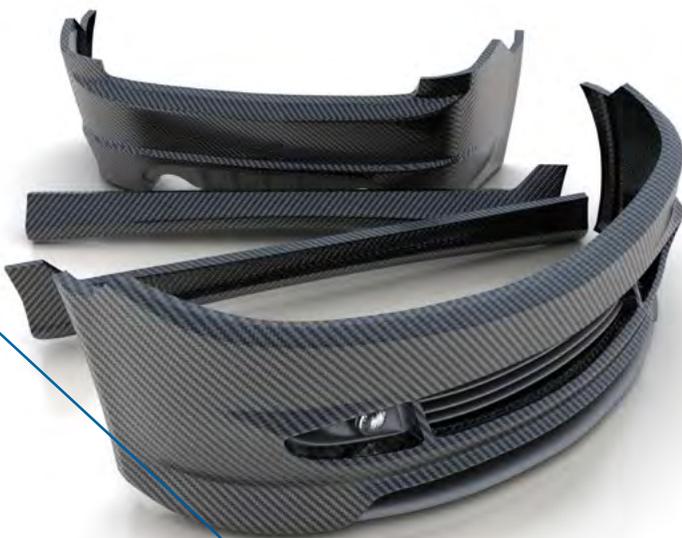
- Pilot-scale equipment that replicates customer production environments for more true-to-life polymer testing
- Compounding and applications operations that create innovative solutions to meet customer needs
- Catalyst labs for developing experimental polymers with enhanced physical properties
- On-site analytical labs that provide tools to understand performance requirements

### **Client-Driven Innovative Focus**

We understand the importance of a competitive and dependable supply of high quality products. Applications often require new levels of performance. Braskem has the capability to provide technical expertise and innovation that meets your product differentiation requirements.

### **Global Presence**

We are focused on being responsive to the needs of our global clients 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 North America, Germany, and Brazil.





## Expanding the Boundaries of Compounds with **High Toughness, High Flow Impact Copolymers**

Braskem's high toughness, high flow impact copolymers allow producers to explore the production of compounds previously unachievable. This evolution in Braskem's portfolio aims to provide a greater balance of processability and toughness, which adds versatility and flexibility. Benefits include:

- Improved toughness impact copolymers for environments requiring very high impact resistance
- Enhanced properties at low viscosity for compounding flexibility and performance
- Exceptional cold temperature and impact resistance
- Very high toughness for improved flexibility in downstream formulation development

## **Next Generation Impact Copolymers** with excellent toughness–stiffness balance

- 100% ductility at -30 C
- Demonstrated up to 30% reduction in external elastomer loading levels in TPO compounds
- Potential impact modifier for compounding, automotive and packaging applications



# Among the Industry's Broadest Homopolymer and Impact Copolymer Portfolios

Depend on Braskem to meet polymer performance needs with a broad portfolio featuring:

- Broad range of melt flow rates
- High melt strength resins for target market opportunities
- Unmatched continuity throughout the design space of polymers

## Unique 2000 Series Impact Copolymers

The 2000 Series Impact Copolymers are designed to meet industry trends for higher levels of performance.

Expand your compounding design freedom with:

- High stiffness and flow performance
- Reduced emissions
- Low gels
- Suppressed tiger marking

## High Melt Strength Grades for High Performance Applications

Conversion processes include large part thermoforming and foaming for end use applications such as automobile headliners, bedliners, tonneau covers and truck parts.

- Sag resistance
- Broader processing window
- Reduced die drool
- Designed to be used in low and high density foam

Product	Melt Flow (g/10min)	Flex Mod (psi)	Flex Mod (Mpa)	N.Izod (ft-lb/in)
<b>Specialty Impact Copolymers to Suppress Tiger Marking</b>				
TI2150C	15	235,000	1,621	1.5
TI2350C	40	235,000	1,621	1.0
TI2600C	66	235,000	1,621	0.9
TI2900C	110	235,000	1,621	0.7
TI71000M	120	260,000	1,793	0.7
<b>High Flow Impact Copolymers</b>				
C700-35N	35	220,000	1,517	1.2
C7100-50NA	50	140,000	966	2.3
TI6800WV	80	155,000	1,069	2.3
TI4900M	115	210,000	1,448	0.7
<b>High Ductility Impact Copolymers</b>				
TI6035NB	3.8	140,000	966	NB
TI6200Q4	20	115,000	793	NB
TI8300C	30	140,000	966	NB
TI6350WV	35	135,000	931	4.2
<b>High Flow Homopolymers</b>				
FP650WV	65	240,000	1,655	0.3
CP1200B	126	180,000	1,241	0.3
<b>High Melt Strength Grades</b>				
TI4003F	0.3	210,000	1,448	NB
INSPIRE 114	0.5	215,000	1,483	NB
F006EC2	0.5	200,000	1,379	1.3
Amppleo 1025MA	2.5	330,000	2,276	0.7

## Broad Offering of High Crystallinity Homopolymers

Developed for the automotive compounding market, our high crystallinity homopolymers provide premium levels of stiffness, flowability, compounding flexibility and performance in composites and compounded TPOs

- Wide range of melt flow rates for lightweighting and performance
- Elevated HDT
- Reduced emissions
- Good scratch resistance
- High gloss

High Crystallinity Homopolymers				
Product	Melt Flow (g/10min)	Flex Mod (psi)	Flex Mod (Mpa)	N.Izod (ft-lb/in)
INSPIRE 6025N	2.5	300,000	2,069	0.7
D218_00	8.0	304,000	2,097	0.6
F350HC2	35	300,000	2,067	0.4
F1000HC	115	300,000	2,069	0.3

Every day, Braskem's 8,000 team members work to improve people's lives through sustainable solutions in chemistry and plastics and engage with partners throughout the value chain to advance the circular economy.

With 41 industrial units in Brazil, United States, Mexico and Germany, net revenue of R\$58 billion (US\$15.8 billion) and exports to around 100 countries, Braskem produces annually over 20 million tons of plastic resins and chemical products.

Braskem America is an indirect wholly owned subsidiary of Braskem S.A. headquartered in Philadelphia. The company is the leading producer of polypropylene in the United States, with six production plants located in Texas, Pennsylvania and West Virginia, an Innovation and Technology Center in Pittsburgh, and a new operation in Boston focused on leveraging groundbreaking developments in biotechnology and advanced materials. For more information, visit [www.braskem.com/usa](http://www.braskem.com/usa).

