



FACT SHEET

PLASTINDIA 2023, New Delhi, INDIA, Feb 01, 2023

PlastIndia is an international plastics exhibition and conference where national and international exhibitors present their new products and technologies. It works as a platform for buyers and sellers, joint ventures, etc., enhancing business prospects, strategic alliances, and technology transfer.

PACKAGING

OVERVIEW

According to a Grand View Research, Inc. report, the global plastic packaging market is expected to reach USD 269.6 billion in 2025. This meets with a growing demand for flexible as well as rigid functional, food, non-food, and beverage packaging products to serve an increasingly urban population, worldwide. SABIC is firmly committed to helping the packaging industry solve the challenges of these needs with an advanced portfolio of materials designed to minimize the environmental impact of packaging, increase recyclability, extend shelf-life and prevent food losses, provide supply security and create sustainable growth.

INDUSTRY LANDSCAPE

According to the Save Food report by the Food Agriculture Organisation of the United Nations, an estimated one-third of food produced for human consumption is lost or wasted – equivalent to over a billion tons of food every year. Looking at future resource challenges, packaging will continue to play a crucial role in helping to reduce waste in the global food supply chain and ensuring that packaged food purchased by consumers is of the highest quality. Demand for the packaging industry is ever-increasing, with manufacturers needing to meet more stringent regulations to protect packaging contents and guarantee food safety.

At the same time, fast-paced lifestyles are driving consumer expectations for brands to deliver packaging solutions that are lightweight, aesthetically distinctive, often transparent, hygienic and easy to open. Consumer focus on convenience and sustainability is not only putting pressure on packaging manufacturers but also on retailers who stock the product, requiring them to drive change down through their value chain. With the demand for a mindset of continuous innovation, which includes considerably increasing the recyclability and reusability of packaging materials, the industry is looking to materials innovators for solutions.

SABIC SOLUTIONS FOR PACKAGING

SABIC is addressing the challenges of the packaging industry with an extensive display of advanced material and technology solutions at PLASTINDIA, demonstrating the feasibility of combining exceptional sustainability with outstanding durability and aesthetics. Over the past three years, the company has been collaborating with numerous leading players across the packaging value chain, focusing on five key drivers in the market: waste reduction through design for recyclability and use of mechanically recycled products, use of certified circular polymers, closed-loop solutions and ocean-bound plastic, use of certified renewable feedstock, and enhanced functionality and consumer appeal. The products and samples on display at SABIC stand during the show in New Delhi, align closely with SABIC's TRUCIRCLE™ program and demonstrate how dedicated industrial partnerships are accelerating the journey towards real circularity without compromising product performance.

REDUCE WASTE

One of the most effective means of reducing waste is the use of durable yet lightweight, mono-material solutions and applications designed for recycling.

- **Tethered closures:** Injection molded with an organoleptic SABIC® HDPE food-grade, this tethered closure design for recycling meets with the new single-use plastics directive that makes closures, caps and lids to remain attached to all beverage containers mandatory by 2024 in the EU. [Read more.](#)
- **Heat-resistant mono-PE pouches:** In close collaboration with SABIC and Covestro, a new fully recyclable stand-up pouch made with SABIC® BOPE material including Covestro's heat-resistant coating resin technology was developed. This transparent coating, currently in a trial phase, has been tested and validated, offering a broader sealing temperature window when processing on form fill and seal (FFS) lines for flexible packaging as it prevents both, film shrinkage and film sticking to heat seal bars during FFS. The new PE-based high-performance, recyclable, mono-material stand-up pouch supports the drive to achieve a circular economy for flexible packaging, as it is a viable solution to replace PET or PA laminates in incumbent solutions. SABIC's BOPE material is available in certified circular as well as certified renewable grades from SABIC's TRUCIRCLE portfolio. [See the video, and read more.](#)
- **Jerry can make with mechanically recycled polymers:** SABIC's new enhanced mechanical recycling solution incorporates the maximum amount of mechanically recycled content without compromising the quality or performance needed for household, industrial and chemical packaging. In this three-layer 20L Jerry can sample, incorporating up to 70% post-consumer resin (PCR) in the middle layer, SABIC® HDPE compounds deliver strong stress cracking resistance even in packaging with thin wall thicknesses for reduced weight while enabling customers to incorporate the desired amount of PCR without compromising on processing and performance requirements. The resulting packaging aims to meet the processing and quality standards of the industry, contributing further to circularity by saving on virgin materials.

INCREASING CIRCULARITY

SABIC's certified circular polymers are based on a mass balance accounting approach according to ISCC PLUS, validating the feedstock content from advanced chemical recycling of mixed plastic waste and contributing to the mitigation of fossil depletion.

- **Ice Cream tub:** Unilever's wholly recycled Magnum® ice cream tubs are made from SABIC's newly developed certified circular impact polypropylene for frozen foods, where high flow and high impact at low temperatures are required.
- **Retort pouches for wet pet food:** SABIC, Mars Petcare and Huhtamaki successfully collaborated in the development of an innovative multi-layer film structure for SHEBA® brand cat food pouches using certified circular PP copolymer from SABIC's TRUCIRCLE portfolio. The phthalate-free and gel-controlled film layer has a 30% average recycled content in the packaging and reduces the use of virgin plastic by around 25%. [Read more.](#)
- **Fresh-cut salad bags:** A premium range of Bonduelle fresh-cut salads are packaged in the food-contact film using certified circular SABIC BOPP produced by advanced recycling of post-consumer plastics. The BOPP film made by VIBAC SpA contains 30% recycled content via mass balance certification. These bags are fully recyclable in polyolefin waste streams. [Read more.](#)

CLOSING THE LOOP & REUSE OF OCEAN-BOUND PLASTIC

One of the biggest challenges in achieving circularity is solutions that will effectively close the loop of plastic packaging within one and the same packaging application segment. On another level, the vast amount of ocean-bound plastic litter in coastal areas requires fast action to prevent it from polluting our oceans and returning it to the material stream of new packaging products.

- **KIND® Healthy snack bar wrappers:** SABIC joined forces with MARS and Landbell in a closed-loop project on KIND's healthy snack bar wrappers based on certified circular SABIC® PP. Advanced recycling of mixed post-consumer plastics collected by Landbell is used to produce food-contact-approved certified circular PP and converted into a flexible BOPP packaging structure. This mono-material application facilitates end-of-life recycling in existing collection and conversion operations without compromising quality and processability. [Read more.](#)

- **Adhesive packaging labels from ocean-bound plastics:** SABIC, UPM Raflatac and Taghleef Industries collaborated to launch the world's first packaging label materials made from certified circular SABIC® PP based on advanced recycled ocean-bound plastic (OBP). This TRUCIRCLE project uses post-consumer plastic waste recovered from areas up to 50 km inland from waterways and proves that OBP can be brought back into a circular material stream for cost-efficient and high-quality packaging applications. You can see label examples made from this ocean-bound plastic on our stand. [Read more.](#)

BIO-BASED FEEDSTOCK SOLUTIONS

Like the TRUCIRCLE portfolio of certified circular polymers, SABIC's certified renewable solutions are ISCC PLUS mass balance accredited. Importantly, they do not compete with human food or animal feed production.

- **Chips bags:** Orkla launched its first chips packaging using certified renewable polypropylene (PP) polymer from SABIC's TRUCIRCLE™ portfolio that is a drop-in solution for replacing fossil-based plastics in the packaging with no compromise on food safety, and is converted into a BOPP or Natural BOPP (NOPP) food packaging film by IRPLAST. In Orkla's chips bags, the material solution from bio-based feedstock reduces the carbon footprint of the three partners' value chains by about 50% compared to the use of traditional non-renewable plastics. [Read more.](#)
- **Multi-layer bottles:** Multi-layer bottles from W. Müller GmbH incorporate certified renewable HDPE polymer from SABIC's TRUCIRCLE portfolio as an inner layer between the core and outer layers that are made of mechanically recycled SABIC HDPE compounds from post-consumer sources. The mono-material structure saves the use of virgin material and meets high processing and quality standards. [Read more.](#)

CONSUMER APPEAL & CONVENIENCE

Beyond sustainability, consumers expect advanced new packaging products to also provide a maximum aesthetic appeal and in-use convenience.

- **Tea capsules:** Melitta Single Portions is using a food-grade SABIC® QRYSTAL PP copolymer with certified feedstock from recycled used plastic waste for its Avoury® brand tea capsules. The transparent, aesthetic and lightweight capsules support up to 80% reduction of fossil depletion vs. conventional designs. [Read more.](#)
- **Yoghurt cups:** At their Thin-wall Application Center in Switzerland, SABIC and NETSTAL are collaborating to transfer the technology of injection compression molding (ICM) to the thin-wall packaging market. ICM opens significant opportunities for down gauging at lower injection pressures, reduced clamp forces and shorter cycle times.
A perfect example is lightweight yet stiff and stackable, aesthetic yoghurt cups molded in a phthalate-free SABIC® PP FLOWPACT grade that ensures high product safety at lower material consumption. [Read more.](#)

APPENDIX

Draft copy for Marcom and MDTM leader review:

1. Details about your business unit/function in India (Including technologies developed in the country, focused on your sector)

SABIC India is established in 1992. Have five offices - Gurgram, Mumbai, Bengaluru, Chennai and Pune. One Technology centre at Bengaluru. Business lines - Polymer, Agri Nutrients, Chemicals, Automotive and Speciality. One compounding plant at Vadodara for PC & Lexan compounding. 571+ employees in India.

2. Products that will be showcased at PlastIndia

- **SABIC® BX202 BOPE** dedicated resin is designed for BOPE film application. It facilitates mono-material PE structures, enabling 100% recycling and closing the circular economy loop. It has excellent processability and is suitable for a commercial BOPP line. It also exhibits very good planarity and printability, thus making it possible for attractive

graphics customization. Additionally, it has excellent toughness and stiffness, improving package integrity.

- **SABIC® PP 5212P** is a high-stiffness PP homopolymer grade, specially developed for bi-axially oriented PP (BOPP) film extrusion with a very specific molecular structure design. PP 5212 BOPP film provides high stiffness performance, which has the potential for downgauging at a 10-15°C higher heat resistance than normal BOPP film enables. PP 5212 BOPP film creates a wider sealing window for lamination film application. PP 5212P is good for use in the outer layer of BOPP film and can be used as a core layer in co-extruded film and/or as a base material for plain films used for label film, stationary, dry food bags, synthetic paper and heat sealed packaging films.
- **SABIC® LDPE 7019EC** is designed for extrusion coating and thermal lamination application. It is an Autoclave LDPE grade, which exhibits excellent processability, lower neck in, uniform thickness distribution and good adhesion. This grade is used in applications like flexible packaging, Aseptic packaging, ALU coating, paper coating, Raffia / woven fabric coating, laminated tube etc.
- **SABIC® COHERE™ S100 (L)** - To improve sealing and mechanical performance of flexible packing film where sealing and seal integrity is the most important and critical parameter. S100 (L) has superior sealing performance in terms of lower SIT and higher hot tack force, which helps our customers to achieve faster packaging speed, excellent sealing through contamination, better packaging integrity during storage, lower energy consumption and the possibility for packing heat-sensitive content. S100 (L) is easy to process with very good bubble stability. S100 (L) has balanced mechanical properties – lower modulus, higher tensile strength and higher dart drop impact strength which helps to reduce packaging damage during storage and handling. The film made with S100L grade has attractive optical performance in terms of transparency and better packaging appearance on the shelf.
- **SABIC's TRUCIRCLE™ solutions** – SABIC works on five pillars to address sustainable development goals (SDG). SABIC's TRUCIRCLE portfolio and services for circular solutions include certified circular polymers that are based on a mass balance accounting approach according to ISCC PLUS, validating the feedstock content from advanced chemical recycling of mixed plastic waste and contributing to the mitigation of fossil depletion. Solutions using mechanically recycled ocean plastic, which can help, remove valuable use plastic from oceanic waterways or adjacent shores. The offering also includes design for recyclability, mechanically recycled products, certified renewable polymers from bio-based feedstock and closed-loop initiatives to recycle plastic back into high-quality applications and help prevent valuable used plastics from becoming waste.

SABIC closely works with its customers and entire value chain partner to develop the most robust and sustainable packaging solution based on these five pillars. Some of the packaging application solutions are highlighted here in Packaging and TRUCIRCLE display table.



Three-layer 20L Jerry can produced using 70% PCR in middle layer. Overall recycle content in Jerry can is ~42%



A premium range of Bonduelle fresh cut salad packaging made with certified circular SABIC® BOPP polymer from TRUCIRCLE™ portfolio are produced by advanced recycling of post-consumer plastics, supporting up to 80% reduction of fossil depletion and contribute to the development of a circular economy.



Orkla launched its first chips packaging using certified renewable polypropylene (PP) polymer from SABIC's TRUCIRCLE™ portfolio that is a drop-in solutions for replacing fossil based plastics in the packaging industry with no compromise on food safety.



Mono-PE stand-up pouches solution from SABIC is designed for recyclability, supporting circular economy goals. The structure is based on a reversed printed BOPE (biaxially oriented polyethylene) film and laminated against a 5-layer blown PE co-extrusion film.



SABIC joined forces with MARS and Landbell in an advanced recycling designed to close the loop on flexible packaging using certified circular PP from its TRUCIRCLE™ portfolio.

- **SABIC Technology centre at Bengaluru** - STC-B (Bangalore – India) helps Regional Customer Collaboration for Application Development, Material Modeling, Predictive Engineering & Simulations, Application Processing (IM) & Testing.

SABIC Technology Centers bring together unique capabilities and competencies:

- Materials Science & Advanced Testing
- Application Processing, Prototyping & Testing
- Predictive Engineering, Simulations, & Design

SABIC Technology Centers & Application Labs strive to work with our customers for

- Fast-tracking application development & optimizing application performance
- Fostering innovative solutions
- Enabling our customers to meet rapidly evolving demands