"Today we know that plastics are polluting our oceans, waterways and natural habitats"

BIM Barrier programme

BIM B ARRIER[®]

- Plastic and PFAS free barrier treatment for recyclable and compostable properties

Packaging materials produced from paper and board are essential tools for enabling the reduction in our dependency on polluting plastics by substituting with more sustainable alternatives. With our unique knowledge of pulp, papermaking and converting, BIM is your perfect partner in the development of a sustainable and greener future for our planet.

Green Chemistry

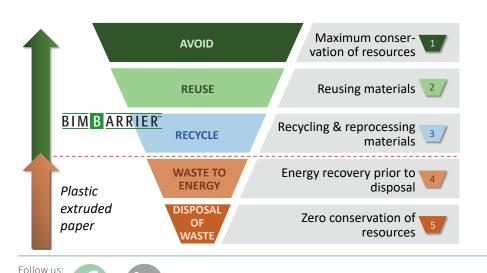
Plastic is prolific in all types of packaging; as an extruded barrier LDPE layer, a BOPP film wrap, or as a PET rigid carton or lid. Only now are we coming to realise the end-of-life problems with these materials.

Papers and boards extruded with plastic as a barrier are technically recyclable today. However, the separation process is complex, can deliver poor yields of recycled fibre plus there is still plastic to dispose of in the end at a cost. Not surprisingly, it has been estimated globally that less than 2% of these materials are recycled annually, leading most to enter landfill where it can persist in the environment for more than 500 years as pollution. *BIM's green chemistry is designed to eliminate the need for plastic in all types of packaging*, from food to cosmetics, while making recycling and fibre reclamation easier and more economical, **enabling circularity through the recovery and re-use of our resources**. BIM Barrier program also includes partly biobased products that further improve green profile.

Benefits

Based on a strong core range, BIM's formulation knowledge enables customised concepts where properties can be combined

- Plastic-free
- Fluorocarbon free
- Re-pulpable and recyclable
- Compostability can be achieved (EN13432)
- High WOGR (water, oil and grease resistance)
- Low temperate and tropical MVTR
- Low OTR
 - Rapid sealing properties.



Technical Profile

BIM's range of barrier coatings are all waterbased dispersions and contain no VOC or solvents. The programme can also be tailored with other speciality chemicals from BIM to add additional functions.

Application can be achieved with all conventional coating methods in-line or off-line with the tailoring of viscosity and rheology to optimise production on each type of asset

- Bar or Blade
- Air-knife
- Film Press
- Curtain
- Gravure
- Flexographic
- Spraying
- Drying can be achieved via Infrared or hot air ovens.

BIM Oilguard programme **BIM OILGUARD**[•] is a PFAS free wet end additive for oil and grease resistance by minimising oil wicking in the paper. When combined with the BIM barrier program, OGR resistance is significantly improved at weak spots like carton board creases. Thickness of barrier coating can also be lowered while maintaining WOGR resistance.

BIM's application specialists provide close support and consultancy for machine set-up and optimisation.

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