



1 *Wood: raw material for cellulose-based polymers.*

2 *Products made of bio-based plastics.*

BIOPLASTICS

IT'S ALL IN THE MIX!

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We develop bio-based plastics for you that have specific, often also novel characteristics profiles equivalent to those of fossil-based plastics or even surpassing them. In doing so, we cover the entire development chain, from polymerization to plastics processing including comprehensive material characterization.

Our strengths lie in the combination of many years of technical expertise with a constant eye on market opportunities and availability of raw materials. This holistic view constitutes our foundation that leads to cost-conscious materials solutions for the most diverse plastics products. We also guarantee that our bio-based plastics can be processed on conventional processing equipment.

Keywords

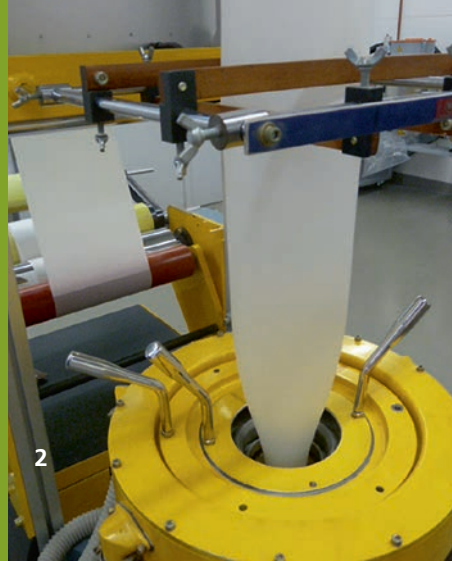
- Monomers and polymers from renewable resources
- Bio-based plastics
- Biodegradable plastics
- Natural fiber treatment
- Plastics reinforced with natural fibers
- Special compounds
- Product and process development
- Plastics analysis and testing

Industrial sectors

- Plastics processing industry
- Automotive and supply industry
- Packaging industry
- Consumer goods industry
- Machinery and plant manufacturers
- Recycling industry



1



2



3

1 Production of adhesive components in laboratory scale.

2 Laboratory blown film line.

3 Heated high speed mixer.

Polymer chemistry

- Development of chemical products based on renewable resources
- Additive systems
- Monomers for polymer synthesis
- Components for adhesives
- Natural fiber treatment
- Analytics and testing

Material development

- Physical functionalization of biopolymers through blending
- Additives
- Fiber reinforcement
- Reactive processing
- Compatibilization in the melt
- Main application areas are injection molding, extrusion, and thermoplastic foaming.

Processing and applications

- Development and compounding of thermoplastic plastics
- Validation on conventional plastics processing equipment
- Plastics reinforced with natural fibers
- Application engineering consulting
- Technology consulting, market and feasibility studies, recycling concepts

Production scale-up and testing

- Pilot and small series production of compounds and products on industrial systems
- Material characterization and component testing
- Testing of biological degradability of materials
- Certified testing laboratory of DIN CERTCO Gesellschaft für Konformitätsbewertung mbH (DIN CERTCO Registration No PL142)

Your benefit

- Competitive advantage due to innovative materials and short development times
- Implementation of your projects from the idea to the finished product
- Quick conducting of tests and their assessment
- Preparation of independent expert opinions
- Scientific support of your research and development projects