



Recompounds

Solutions for circular value creation





Brenntag Polymers

Innovative strength and solutions expertise

With extensive market knowledge, application and formulation expertise, we're dedicated to the development and provision of innovative solutions and services for the polymer processing industry, with a special focus on sustainability.

Our outstanding product portfolio includes high-performance and engineering polymers, biopolymers, compounds, recompounds, additives, dyes, pigments, and much more. In addition to a distribution offering from the world's leading manufacturers, we develop and produce **compounds according to specific customer demands**. The integration of alternative raw material sources into product development is becoming increasingly relevant.

We offer innovative solutions for polymer recycling that meet the requirements of one of the most important technologies of the future. Recompounds are an example of recycling engineering polymers to produce sustainable products based on industrial secondary raw materials.

Our sustainable polymer solutions

- Development and production of high-quality recompounds from sorted base materials
- Advice on setting up your own circulation system
- Other circular products and services for your sustainability targets

Closing the loop with sustainable solutions

From residual polymers to valuable resources

Recompounds are based on recycled production residues from the polymer industry, such as sprues or start-up parts. Recycling processes timely make the valuable raw materials available again for product development and processing.

Products for sophisticated applications

Innovative materials with specific properties are created from sorted regrind by compounding. These are reused in sophisticated technical applications for fields of the future, such as new mobility, regenerative energies, or mechanical and plant engineering.

Recycling without quality loss

The recycling concept enables reuse at a consistently high quality level. The properties of the recompounds can even be improved compared with the base material through targeted additives and modified to suit individual customer demands.

For instance, opaque to transparent materials with special requirements in terms of optics and purity as well as various color settings, such as for lighting applications like vehicle lighting or blends (for example, PC/PBT GF, PMMA/ABS), and much more can be

realized, with a variable recyclate content of up to one hundred percent regrind. The high-quality regrind can be reprocessed in a stable manner with the most diverse procedures, such as injection molding and extrusion.

Raw materials shortage and environmental impact in the spotlight

The recycling of reusable polymers from industrial production is an effective and sustainable solution for saving limited resources, reducing residual material quantities and emissions, and advancing the circular economy.

For your circular value creation

In order to use resources responsibly despite the strong demand for polymers, to save costs, reduce the carbon footprint, prevent raw material shortages and supply bottlenecks, and secure competitiveness, our service portfolio also includes advising our customers on setting up their own circulation system.

We support you in achieving your sustainability goals.



Recompounding process

In recompounding, production residues such as sprues or start-up parts are used and usually ground at the customer's end. We combine this ground material with specific additives to produce a high-quality regranulate that is reused in sophisticated technical applications.

1. Base material



2. Sorted regrind



3. Additivation and compounding



4. High-quality regranulate



5. Design and product development



6. Future-proof applications





Combining outstanding properties and recycling potential

Resource-efficient, high-performing and individual

Advantages of recompounds

- Resource saving: recycling valuable raw materials, reducing primary raw material and energy consumption
- Reduction of emissions: Less waste and environmental impact
- CO₂ advantages compared to new products
- Cost savings through sustainable use of materials, decreased energy and disposal costs
- Lower manufacturing and parts costs
- Higher production efficiency, shorter cycle times
- Consistent high quality and stable workability
- Strengthening supply security in the event of raw material shortages and supply bottlenecks
- Conformity with current market requirements
- Individual material settings like technical specifications, color schemes, recyclate content, blends (e.g., PC/PBT GF, PMMA/ABS), etc.
- High degree of flexibility, processing of:
 - customer-owned materials
 - in-house materials (distribution/mixes)
 - commercially available materials

Application options

Recompounds are used in all relevant polymer markets, e.g., for structural and lightweight parts, battery holders, carrier boards, spacers, housings and covers for e-mobility, as components in heat pumps, wind and solar energy systems, or as elements in lighting technology and LEDs.

Our circular portfolio* also includes

- Biobased high-performance polymers
- Products with a share of recycled PMMA or made from ISCC-PLUS-certified raw materials
- Biobased and/or biodegradable polymers, even suitable for food-contact applications
- TPV from recyclate and biobased raw materials
- ISCC-Plus-certified polyolefins produced from renewable feedstocks
- Additives that support recycling processes or improve recyclate quality, and additives made from renewable raw materials
- Water treatment for polymer recycling and much more

* The portfolio may vary by country. For the specific portfolio in your country, please contact us or visit our website at [brenntag.com](https://www.brenntag.com).



Join us on our journey to a sustainable future

We are working to ensure a sustainable future

For many years now, sustainability issues such as safety, environmental protection and supply chain responsibility have been deeply embedded within our company. We strive to become the industry leader in the responsible distribution of sustainable polymer chemicals and ingredients.

Sustainable practices, recycling initiatives and the development of environmentally friendly polymers are crucial to us. We continue to investigate biobased and biodegradable polymers, with the aim of reducing our carbon footprint, and we are already offering solutions that include various recycled polymers.

We hold Platinum status in the EcoVadis sustainability assessment, placing us in the top 1% across all industries assessed for sustainability performance.

Read more about our global sustainability strategy, which includes aspects such as climate protection, reduction of emissions, resource efficiency, and circular economy on our sustainability webpages at **[brenntag.com](https://www.brenntag.com)**.

Do you already know our **CO₂Xplorer** online tool, which empowers business users to take control of the environmental impact of their products? Calculate your ecological footprint at **[brenntag.com](https://www.brenntag.com)**.



Contact us

Brenntag GmbH
Messeallee 11
45131 Essen
Germany
polymers.EMEA@brenntag.com

[brenntag.com](https://www.brenntag.com)