Compounds for engineering and construction

Custom compounds with added sustainability

Market and customer-specific compounds

We draw on in-depth expertise in the development and production of innovative compounds made from conventional and bio-based raw materials. We tailor these compounds to the specific needs of our customers. Our unique know-how in polymers, additives, and fillers gives us the decisive edge, especially when it comes to developing solutions for sophisticated technical applications. With optimal value for money, our compounds are the perfect choice for the civil engineering and construction industry. They can be used e.g. for trips, pipes, light wells, protective sheeting, underlays, and membranes.

Sustainable solution

As a family-owned company, we are committed to sustainability. Within the framework of our own material management, we intensively promote the regranulation and compounding of recyclables from our film production at our Competence Center. We also take back recyclables from our customers, such as web waste and start-up material, to use them as feedstock for new compounds whenever possible. This allows us to help our customers close their loops.

Reducing carbon footprints

Keeping materials in a loop plays a major role in improving their eco-balance. Driven by this philosophy, we develop innovative concepts that conserve resources by using the highest possible amount of recyclates in our compounds. This allows us to support our customers in reaching their sustainability goals for recyclability, recycling rates and the reduction of carbon footprints. Together with industry partners, we at SÜDPACK also carry out corresponding life cycle assessments for special compounds, if required, which take into account the entire life cycle of these materials.

- **UV and weather resistance**
- **Profitability**
- **Customizable barrier function**

★StarBlend by SÜDPACK

A sustainable choice – compounds with recyclates and biomaterials

Our recyclates are mixed with primary plastics, additives, biopolymers and fillers in order to precisely obtain the specific properties that a customer wants for the plastic. The spectrum of possibilities ranges from mechanical properties to chemical resistance, UV resistance or antistatic properties right through to an exact color, which is generally a must, for example for injection-molded parts for high-quality branded products.

The customer determines the recyclate content in their compound and whether bio-based or conventional polymers are used. There is no upper limit here, material solutions made of 100% recyclates are also possible.

StarBlend® – our product portfolio

Our portfolio of high-end thermoplastic compounds covers non-filled, mineral and glass-fiber-filled granules. They are suitable for injection molding, blow molding and extrusion.

Recyclate basis	Biopolymer basis	Further options
100% post-industrial film recyclates with consistent quality and raw materials with compliance for food contact	Bio-based PP compounds with various filler options (chalk, talcum, glass/natural fibers, etc.)	Contract compounding based on customer-specific recipes
Post-industrial and post-consumer polypropylene (PP) compounds with various filler options (chalk, talcum, glass/natural fibers, etc.) for injection molding	Polylactide (PLA) based compounds for injection molding, for example with 50% PLA recyclate for hygienic applications	Compounds with bio-based fillers (lignin, cellulose, wood fibers, etc.)
PP compounds for extrusion with a filler content (talcum/chalk) of up to 50%	PLA processing aids/masterbatches for film extrusion	

StarBlend compounds with recyclates

A portfolio of compounds is available that helps to accelerate the development process and time-to-market. Any compound can be customized to provide the desired properties of the end product and to use the required amount of recyclate.

Post-industrial recyclate compounds

Product name	Polymer basis	Recyclate content	Filler	Melt flow rate [g/10min], 230°C, 2.16 kg	E modulus [MPa]	Density [g/cm3]
StarBlend PP 010-01 R T12 W	PP (PE/PA)	≥ 40%	Talcum (12%)	5.5	1550	1.08
StarBlend PP 005-01 R T15 N	PP (PE/PA)	≥ 40%	Talcum (15%)	6.2	1590	1.08
StarBlend PP 003-01 R T20 N	PP	≥ 70%	Talcum (20%)	32	2280	1.04
StarBlend PP 009-01 R GF30 B	PP	≥ 25%	Glass fiber (30%)	10	5880	1.10
StarBlend PP 006-01 R GF15 B	PP	≥ 55%	Glass fiber (15%)	15.5	3200	0.98

Post-consumer recyclate compounds

Product name	Polymer basis	Recyclate content	Filler	Melt flow rate [g/10min], 230°C, 2.16 kg	E modulus [MPa]	Density [g/cm3]
StarBlend PP 002-01 R T12 B	PP	≥ 40%	Talcum (12%)	18	2200	0.97
StarBlend PP 004-01 R T20 N	PP	≥ 70%	Talcum (20%)	22	2590	1.04
StarBlend PP 001-01 R T12 W	PP	≥ 40%	Talcum (12%)	20	2260	0.97

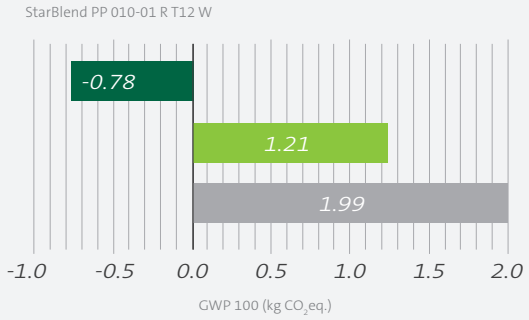
Biopolymer compounds

Product name	Polymer basis	Recyclate content	Filler	Melt flow rate [g/10min], 230°C, 2.16 kg	E modulus [MPa]	Density [g/cm3]
StarBlend PP 007-01 BIO T20 N	Bio - PP	≥ 75%	Talcum (20%)	15.5	3060	1.04
StarBlend PP 008-01 BIO NF05 N	Bio - PP	≥ 90%	Natural fiber (5%)	17	2390	0.90
StarBlend PP 012-03 BIO T20 GY	Bio - PP	≥ 80%	Talcum (20%)	14	2550	1.03

Reduction of the carbon footprint with the use of recyclates and bio-based raw materials:

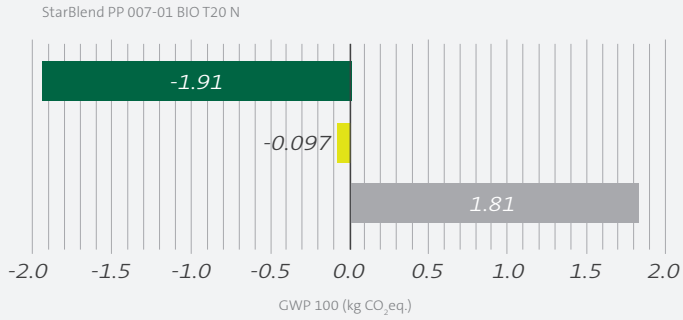
Reduction of the carbon footprint with processing of recyclates

CO_2eq. compound PP virgin material vs. compound PP with 40% recyclate content, white



Reduction of the carbon footprint by processing bio-based materials

CO_2eq. compound PP virgin material vs. compound PP from bio-based material



Potential saving | Recyclate compound | Fossil compound | Bio compound

Source: SKZ (CO2 balance sheet for PP compounds ordered by SÜDPACK)

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Our certificates:

DIN EN ISO 14001
Environmental Management System

DIN EN ISO 9001
Quality Management

ISCC PLUS
International Sustainability and Carbon Certification

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