



SYSTALEN REGRANULATES FOR PACKAGING



THE COLORFUL WORLD OF SYSTALEN PRIMUS

Systalen PRIMUS in HDPE or PP, thanks to the special production process involved, is fully able to supply the private-consumer segment with fit-for-purpose packages.

Significantly reduced odor and above all the multifarious **coloration options** are salient features of these regranulates, which are offered in the basic versions of Natural, White and Grey:



Whether in response to product color stipulations from a customer or developed in-house – the colorful world of Systalen PRIMUS is well-nigh unlimited. New options include a light-yellow, mauve, dark-blue, gold or orange. Or a pink or light-green, already familiar from the world of packaging. Der Grüne Punkt's pilot plant team has passed the test with flying colors – in terms of both development and consultancy.



SYSTALEN – A CLOSED LOOP FOR PACKAGES

Systalen opens up a new dimension in terms of recyclate production and applications – with regranulates made from polypropylene (PP) and high-density polyethylene (HDPE) in PRIMUS quality. The raw material for both types of plastic is waste from the Yellow Sack.

SYSTALEN PRIMUS HDPE:

Consists primarily of used shampoo and cleaning agent bottles, and is just as good as new merchandise – with a significant advantage in terms of sustainability.

THE SYSTALEN REGRANULATE DIMENSION:

- not colored
- odor-minimized
- light-permeable, rendering the fill level visible
- impairment of product's performance and fragrance practically precluded
- can be recycled again
- sustainable

SYSTALEN PRIMUS PP:

The market appreciates PP for the sheer diversity of its possible applications. Why not change over to Systalen PRIMUS PP when it comes to packages or packaging constituents? We will be pleased to advise on relevant applications.

The Frosch flip-top closures made from Systalen PRIMUS PP have passed the manufacturer's endurance tests!

NO DISADVANTAGES COMPARED TO CONVENTIONAL CLOSURES MADE FROM NEW MERCHANDISE:

- high-class visual appearance
- high-class durability
- high-class practical utility of the flip-top closure
- high-class closed-loop suitability



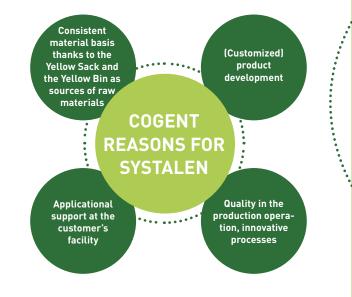
SYSTALEN – A PRODUCT FROM DER GRÜNE PUNKT

Der Grüne Punkt is synonymous with a smoothly functioning closed-cycle economy. Under the **Systalen brand**, our own top-quality **plastic recyclates and compounds made of PP, HDPE and LDPE for well-nigh all non-food plastic applications** are produced in-house and sold worldwide. The raw materials used for this purpose are 100 % post-consumer material from the Yellow Sack and the Yellow Bin.

Systalen is "Made in Germany" – manufactured in the production facilities of Systec Plastics Hörstel (North Rhine-Westphalia) and Systec Plastics Eisfeld (Thuringia). Systalen is ideally suited for injection-molding, molds and extrusion. No matter whether it's standard merchandise, a customized recipe or in PRIMUS quality for producing packages: our products constitute a genuine alternative to producing new plastics, since we prioritize quality and offer maximized customer benefits.

Not only because at our own plastics pilot plant in Cologne we develop customized recipes up to series production maturity, but also because we offer the requisite follow-up services. When you buy Systalen, you will on request also receive the relevant **applications-engineering consultancy on site free of charge.**

Systalen offers a perfect all-round package, from product development right through to product utilization.



SYSTALEN PRIMUS FOR SALES PACKAGES

Whereas hitherto sales packages made of recycled plastic could be produced only with PET, predominantly from beverage bottles, alternatives are now available in the shape of Systalen PRIMUS in the plastic types HDPE and PP.

This quantum leap forward is the result of intensive development work in Der Grüne Punkt's plastics pilot plant, where the innovative PRIMUS process was created.





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Hot washing: flakes are intensively cleaned.

Color-sorting:

flakes are individually sorted by color.

Extrusion with specification and integrated odor reduction:

flakes are compounded to create regranulates. By admixing dyestuffs and other additives, defined material properties can be reproducibly achieved, and an odor-minimized product fine-tuned.

After this treatment, as of now **bottles and other packages** can be produced from high-quality, odor-reduced, light-permeable **PRIMUS HDPE** or also particularly stable containers. **PRIMUS PP** is available for a multiplicity of highly specific applications like **closures and containers, boxes,** etc. And all in your corporate or chosen colors.

SYSTALEN IS ALSO PREMIUM IN ITS STANDARD QUALITY

Systalen regranulates offer the plastics processing industry options for all kinds of different applications. As **standard merchandise in PP, LDPE (also blow-moldable), HDPE and LD-HD**

or as a customized recipe. Thanks to certification under EUCert, users can apply for the "Blue Angel" for end-products made of Systalen, provided these consist of 80 % Systalen. A symbol that is also appreciated by consumers as a guarantor of sustainability and high quality.

THESE ARE ALREADY AVAILABLE IN SYSTALEN!

Construction:

Drainage pipes, profiles, cable conduits, cable covers, wastewater pipes, molded parts, composite aluminum panels, façade cladding, guttering, builders' buckets, paint buckets, films, and much more

Outdoor:

lawn grids, window boxes, planting bowls and flower pots, and much more

Home:

shopping baskets, dustpans and brushes, buckets, decorative wrinkle-effect boxes and decorative flowerpots, transport boxes and much more

Automotive:

battery cases, child seat housings, and much more

Logistik: pallets, and much more

Recycled plastic reduces environmental impact. This is why Der Grüne Punkt has had **Systalen regranulates' eco-profiles** calculated and confirmed by the prestigious **ifeu Institute for Energy and Environmental Research Heidelberg GmbH.** Result: Systalen saves up to 50 percent CO₂ compared to new plastic. Advantages from which plastic users, too, can only benefit.



THE SYSTALEN PRIMUS REGRANULATE PRODUCT RANGE HDPE

HDPE

Natural:	31.9010/ Systalen HDPE 70000 na 002/natural (PRIMUS)
White:	31.9020/ Systalen HDPE 70002 wt 002/white (PRIMUS)
Grey:	31.9130/ Systalen HDPE 70104 gr 100/grey (PRIMUS)

PP

Natural:	32.9001/ Systalen PP C-33900 na 001/natural (PRIMUS)
White:	32.9002/ Systalen PP 33901 wt 001/white (PRIMUS)
Grey:	32.9003/ Systalen PP 34900 gr 002/grey (PRIMUS)

THE SYSTALEN STANDARD REGRANULATE PRODUCT RANGE

SYSTALEN 11404 gr 011 - PP SYSTALEN 13404 gr 002 - PP SYSTALEN 13404 gr 014 - PP SYSTALEN 13704 gr 015 - PP SYSTALEN 32104 gr 003 - LDPE SYSTALEN 30.0400 LD-C02000 gr000 - LDPE (suited for blow-molding) SYSTALEN 70104 gr 035 - HDPE SYSTALEN 92104 gr 006 - LD-HD 70-30

In addition, we also supply **Systalen regrinds** and **Systalen** agglomerates.

Questions about the Systalen products? Contact: Tel. +49 2203 937 555 oder info@systalen.de

Systalen – a product from Systec Plastics GmbH/ Systec Plastics Eisfeld GmbH. Companies of the Der Grüne Punkt Group

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