

## SYSTALEN PREMIUM GRANULATES

As good as new

Under the brand name of Systalen, the group of companies headed by Der Grüne Punkt markets high-quality plastic granulates and compounds made from polypropylene (PP), low-density polyethylene (LDPE) and high-density polyethylene (HDPE). Most of its raw materials come from the Yellow Sack and the Yellow Bin. Manufactured at two German facilities, the products stand for quality and applicational diversity well-nigh equivalent to new merchandise. They are ideally suited for injection-molding, blow-molding and extrusion.

Irrespective of whether it's standard merchandise or a customized recipe: at its plastics pilot plant in Cologne, Der Grüne Punkt is continually expanding the options that Systalen offers, and in close mutual feedback with its customers is developing new recipes to series maturity. Systalen offers options and innovations – for simple products and path-breaking applications like the translucent cleaning agent bottles from Werner & Mertz. Manufacturers of plastic products made of Systalen can also apply for the "Blue Angel" – as the Ecoline series from Gies shows. This means that in more and more sectors, Systalen is the material of choice.



Translucent HDPE bottles made of 100 % Systalen, awarded the German Packaging Prize in the "Sustainability" category.

The Ecoline series from Gies is made of 100 % Systalen (PP) and bears the Blue Angel.

Photos: Werner & Mertz, Der Grüne Punkt



### THE SYSTALEN PRODUCT RANGE

#### SYSTALEN GRANULATES

Standardized or customized  
For high-quality applications as well

#### SYSTALEN GRINDING STOCKS

Quality from the starting material to the semi-finished product

#### SYSTALEN AGGLOMERATES

For more sustainability and new products

Systalen – a product from Systec Plastics GmbH /  
Systec Plastics Eisfeld GmbH, manufactured for:

Der Grüne Punkt –  
Duales System Deutschland GmbH  
Frankfurter Straße 720 – 726  
D-51145 Cologne  
www.gruener-punkt.de  
www.systalen.de

A member company of Der Grüne Punkt Group

Responsible under German press legislation: Helmut Schmitz  
Status: September 2016



# SYSTALEN

TOP-QUALITY GRANULATES  
WITH AN ECO-PROFILE



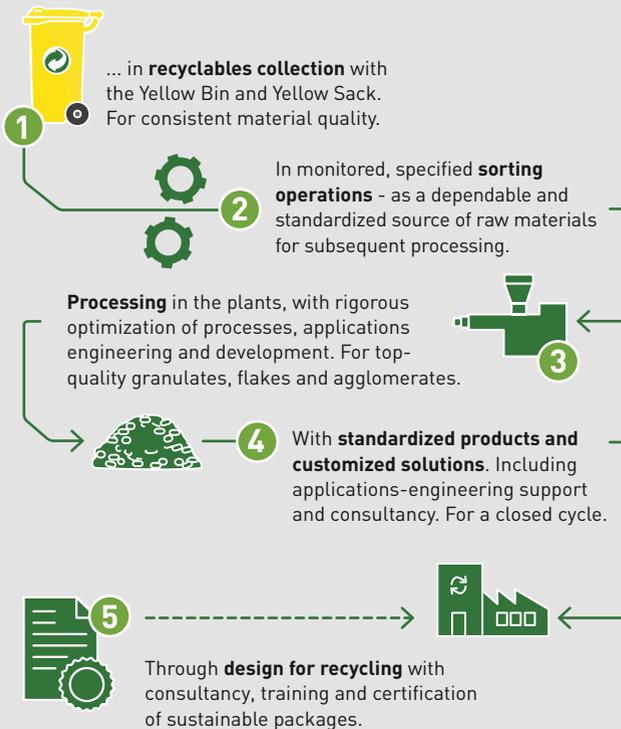
## DER GRÜNE PUNKT

### Motor of the closed-cycle economy

Der Grüne Punkt was founded in 1990 as a sustainable solution for refuse avoidance – back then as the first and only dual system. Today, it's synonymous with a fully functional circular economy.

In order to close the recyclable-resource circuit, Der Grüne Punkt creates access to high-quality secondary raw materials for manufacturing new products. Under the Systalen brand, it produces and sells its own plastic recyclates. Moreover, year by year Der Grüne Punkt invests in new methods of recycling and application technologies, design-enhances the processes involved in treating plastics, and creates innovative consultancy capabilities – always aimed at improving the quality of the secondary raw material involved and closing even more recyclable-resource circuits.

### QUALITY CLOSES THE CYCLE ...



## ECO-PROFILE

### Recycled plastics for reduced environmental impact

It's self-evident that recycled plastics reduce environmental impact and resource consumption. Systalen underpins this assertion with specific figures: eco-profiles show how much eco-friendlier it is to manufacture products from recycled plastic compared to producing them from primary raw materials.

In contrast to life-cycle analyses, which evaluate a product's entire life-cycle, eco-profiles analyze and describe a specified section of the product cycle. In our case, the manufacture of Systalen, the recyclate from Der Grüne Punkt.

The product's eco-profile covers all the expenditures caused by the production of the recyclate, including the collection and sorting of the starting material and the treatment of all non-recyclables involved. This means the eco-profile includes raw material extraction and treatment, energy provision and the production steps concerned all the way through to the recyclate examined. All raw material withdrawal, plus emissions in air and water along this process chain, are factored in.

The calculations were performed by the experts at IFEU in Heidelberg and were modeled on the systemic approach adopted in the eco-profiles published by the trade association Plastics Europe. The comparison of the expenditures determined for the production of Systalen, too, is based on the up-to-date data records for new merchandise, thus assuring methodological comparability.

A DIRECT COMPARISON*		
Savings compared with "new" plastic		
<b>Greenhouse effect</b>	0.8 kg CO <sub>2</sub> -eq./kg	50 %
<b>Process energy</b>	18.8 MJ/kg	60 %
<b>Acidification</b>	2.5 kg SO <sub>2</sub> -eq./kg	59 %
<b>Nutrient input</b>	0.9 kg PO <sub>4</sub> -eq./kg	79 %

\* These values relate to PP from the facility in Hörstel.

## ECO-PROFILE

### Reduced environmental impact overall

The manufacture of Systalen creates a significantly lower environmental impact than producing plastics from primary raw materials like crude oil. Depending on the type of plastic and the production process involved, for example, the CO<sub>2</sub> emissions are halved compared to manufacturing "new merchandise".

### SAVINGS COMPARED TO PRIMARY MERCHANDISE

