

Systalen. Developed. Tested. Marketed

The paramount focus is on our customers' products and processes. To enable us to supply application-tailored material, Systalen will on request be customized to suit customers' requirements. From product development to series production of granulates and compounds, this is done by Der Grüne Punkt at its own Technical Center in Cologne.

High-tech equipment in the Technical Center for high-tech products:

- Twin-screw extruder
- Blown film system
- Injection molding machine

The development of new Systalen products and the continuous improvement in quality requires state-of-the-art laboratory technology for testing physical and mechanical properties:

- Pendulum impact tester to determine (notched) impact strength
- Tensile testing machine to measure tensile modulus, tensile strength and elongation at break

- MFR tester to measure flowability
- Differential scanning calorimetry (DSC) for thermal analysis
- X-ray fluorescence spectroscopy (XRF)
- Microwave oven to determine the residue on ignition
- Spectrophotometer to measure color and translucence
- Karl Fischer titrator for quantitative determination of water content
- Moisture analyzer to determine moisture/volatile matter
- Helium pycnometer and densitometer to measure density

Following successful sampling from the Technical Center in Cologne, and approval by the customer, the recipes are transferred to the production facilities (scale-up).

Important: Even after product development, Systalen's sales people are your contact persons. They coordinate, control and provide application technology support, including after-sales service!



References

With these customers we practise an intensive, successful collaboration for using Systalen in products and packages:



And now we're looking forward to hearing from you!

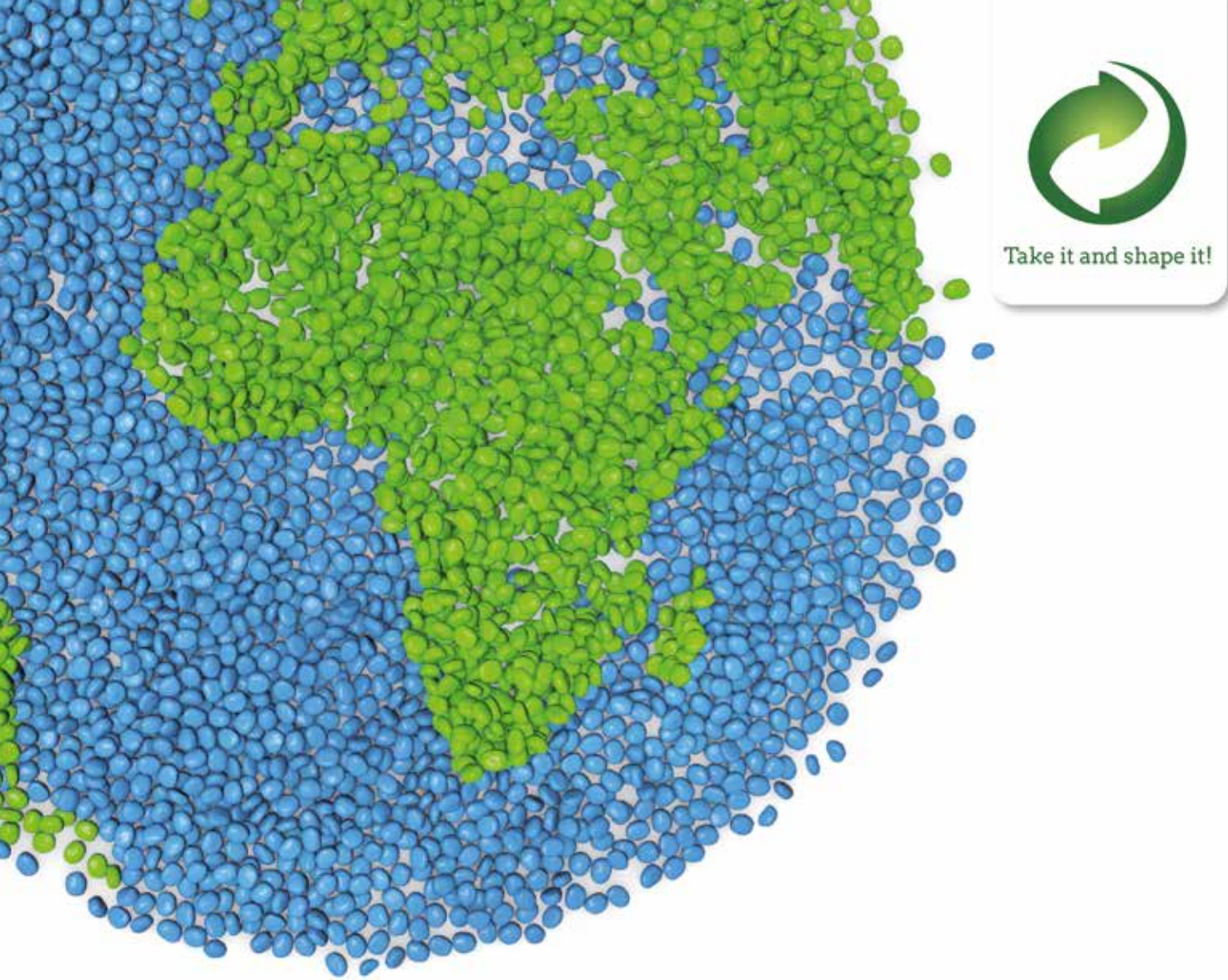
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Systalen® – a product of Systec Plastics GmbH / Systec Plastics Eisfeld GmbH, manufactured for:

Der Grüne Punkt –
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A member company of Der Grüne Punkt Group
Responsible under German press legislation: Helmut Schmitz
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SYSTALEN®

premium recycled plastics

ONE SOURCE. ONE BRAND.
AN INFINITY OF APPLICATIONS.



Systalen. Sustainability with CO₂ certificate

Save significant amounts of CO₂ in the production process and have these savings documented and certified? This and more can be done with the recycled plastics of the Systalen brand from Der Grüne Punkt.

Advantage eco-profiles

IFEU in Heidelberg has checked and officially confirmed the production process for Systalen as compared to that for new merchandise:

- quantifiably reduced environmental impact
- depending on the type of Systalen plastic involved, savings of up to 50% CO₂.

Advantage CO₂ certificate for Systalen customers

Benefit from using Systalen in your production operation: Der Grüne Punkt provides free of charge for its customers a certificate evidencing the savings achieved in terms of CO₂ equivalents. A definite plus for your environmental performance balance.

Advantage Quality Mark for % of Recycled Plastics

In addition, Der Grüne Punkt, together with partners at the "RAL Institute for Quality Assurance and Labelling", has set up the „Gütegemeinschaft Rezyklate aus haushaltsnahen Wertstoffsammlungen e.V.", which offers its members the **Quality Mark % of Recycled Plastics** for printing on their packages or products. This Quality Mark indicates the content of plastics meticulously recovered from the Yellow Bag, Yellow Bin or similar systems in other EU nations.

Our certifications for your benefit:

- DIN EN ISO certifications: we use a quality and eco-management system in conformity with DIN EN ISO 9001: 2008 and EN ISO 14001: 2004 + cor.1: 2009
- Certification under EUCert ("Blue Angel" possible for your products)
- CO₂ certificate: your annual quantity of Systalen is a contribution towards climate protection – evidenced free of charge by CO₂ equivalents
- RAL Quality Mark: also possible for your products or packages



Systalen closes cycles along the value added chain



Locales for Systalen innovations

Systalen is „Made in Germany“. Systec Plastics GmbH, Hörstel (North Rhine-Westphalia) and Systec Plastics Eisfeld GmbH (Thuringia) have been part of the Der Grüne Punkt group since 2010 and 2012 respectively. In both production facilities, approximately 51,000 tons of Systalen plastic recyclates are produced every year.

- Capacities at a glance**
- Systec Plastics GmbH produces granulates made of polyolefin plastics (PP) in premium quality, customized in terms of physical and mechanical characteristics or color. The plant possesses an output capacity of 20,000 t PP/p.a.
 - Systec Plastics Eisfeld GmbH is one of Europe’s largest, most sophisticated producers of plastic granulates made from post-consumer waste. The plant currently has an output capacity of 28,000 t LDPE/p.a. and 3,000 t PRIMUS PP + HDPE p.a

Systalen is inherently suitable for the following production processes:

