

PRESS RELEASE





Frankfurt, February 16, 2016

INEOS STYROLUTION OFFERS MATERIAL SOLUTIONS FOR PLAYMOBIL

- PLAYMOBIL selects Zylar® for the production of three special figures
- Specialty styrenics as material of choice for toughness, processing and design in terms of transparency
- INEOS Styrolution offers customer-centric solutions to meet demanding requirements

In search of a material solution for transparent PLAYMOBIL figures, geobra Brandstätter Stiftung & Co. KG, the manufacturer of PLAYMOBIL toys and hence Germany's biggest toy producer, partnered with INEOS Styrolution, the global leader in styrenics.

PLAYMOBIL decided to use INEOS Styrolution's Zylar due to its high toughness and high clarity for three special figures: an ice dragon, a transparent pink robot and a bright pirate.

Among the required transparency, the high wall-thickness of the figures is particularly challenging and rather unusual as well as inappropriate for injection-molded parts. Due to this wall-thickness, sink marks, vacuoles, bad reproducibility, low size accuracy and a long cooling time have to be considered. To counteract these effects, the materials' shrinkage has to be



low and flowability has to be high. In response to these needs a grade of Zylar was identified as the material of choice for the transparent parts of the PLAYMOBIL figures. A determining factor when producing toys for children is product safety. Accordingly, Zylar 550, with a high impact resistance, has been chosen to avoid hard breakage of the figures in order to eliminate the risk of injuries.

"Zylar has become more and more a material of choice for toys. Without plastics many toys and all kinds of sporting gear wouldn't exist or the non-plastic experience alternatives would be way beyond the reach of countless families and their children," says Peter Rath, Director Sales Construction, Distribution, Compounding & Others, INEOS Styrolution. "Therefore we are honored to work with such an iconic toy producer helping them to find the perfect solution for their special applications."

Key points:

• Material of choice for processing, design and safety:

 Zylar 550, INEOS Styrolution's Methylmethacrylate-Butadiene-Styrene (MBS), provides practical toughness, good clarity and superior processing characteristics for demanding injection molded applications. These properties fulfill OEM requirements in terms of safety, transparency and processing. Thus this material meets both the aesthetic and functional requirements requested by PLAYMOBIL.

• Quality with customized solutions:

O Given its brilliant transparency and low haze, Zylar products can be colored to empower customers to bring their applications to life without sacrificing strength. Additionally, boasting high flowability, Zylar can fill complex molds in shorter cycle times, which leads to optimized energy efficiencies during production and its lower density. In total, high customization plus higher productivity, lower energy consumption and less molded-in stress is possible.

A versatile and universal solution:

 As a trusted material solution with excellent property retention and processability, Zylar is currently used for medical devices processing or transparent toy parts, but it is present, for instance, in various household applications such as water filters or coffee machine water containers.



About INEOS Styrolution

INEOS Styrolution is the leading, global styrenics supplier with a focus on styrene monomer, polystyrene, ABS Standard and styrenic specialties. With world-class production facilities and more than 80 years of experience, INEOS Styrolution helps its customers succeed by offering the best possible solution, designed to give them a competitive edge in their markets. The company provides styrenic applications for many everyday products across a broad range of industries, including automotive, electronics, household, construction, healthcare, toys/sports/leisure, and packaging. In 2014, sales were at 5.4 billion euros. INEOS Styrolution employs approximately 3,100 people and operates 15 production sites in nine countries.

For further information, please visit <u>www.ineos-styrolution.com.</u>

IMAGES:

Images in high-resolution are available for download here.

CONTACT

Julia Herzog

Manager Marketing Communications EMEA

INEOS Styrolution Group GmbH Erlenstrasse 2 60325 Frankfurt Germany

Phone: +49 69 509550-1221

Email: julia.herzog@styrolution.com Website: <u>www.ineos-styrolution.com</u>