

News Release

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Hot, hotter, Elastocoat® C for pultrusion

- **New Elastocoat® C 6226/107 provides temperature stability up to 200°C**
- **Winner of the Innovation Award in Foamed Plastics and Polyurethane 2019 by FSK – Fachverband Schaumkunststoffe und Polyurethane e.V.**

Elastocoat® C is BASF's renowned polyurethane (PU) resin, which is used in pultrusion technology for high performance profiles. In contrast to other resins, these PU systems exhibit significant advantages not only for pultrusion speeds at low pull forces and a very high interlaminar shear strength (ILSS) and no emission at the profile.

With the launch of a new grade Elastocoat® C 6226/107, the product is opening up a range of new application spheres. First of all, and using an innovative catalyst developed by BASF as a basis, this product advancement makes processing temperatures of up to 200°C possible, which opens up new fields of use, for example in automotive or construction applications. In contrast to its sister products that only allow the one or the other, it can be reinforced with both glass and carbon fiber. Furthermore, it features a very low viscosity and a pull force of less than 2kN (Kilonewton). "By developing our own new BASF catalyst for polyurethanes and polyisocyanurates, we are now able to fine-tune the reactivity of your pultrusion systems in innovative ways. A lithium chloride salt-based complex, in combination with a special epoxy and internal mould release, controls the reaction pathway between PU and PIR to allow separated PU-rich and PIR-rich segments to be obtained at nanoscale level. The new formulation gains the temperature and chemical stability of a PIR bond by maintaining non-brittle PU mechanical properties," explains Dr. Julia Liese, Laboratory Manager in Polyurethane Research at BASF.

As Elastocoat ® C 6226/107 is opening up a whole new dimension in temperature stability, it has now been recognized by the German FSK – Fachverband Schaumkunststoffe und Polyurethane with the Innovation Award Plastics and Polyurethane 2019. “The award provides us with welcome recognition of our work, while at the same time providing an impetus to see this new product become successfully established on the market. The outstanding teamwork exhibited by research, development and marketing made this success possible. The prize confirms for us that we will be able to tap into new markets by developing the high-temperature system,” says Bert Neuhaus, Project Manager Development at BASF.

With this new generation of pultrusion resin, Elastocoat® C 6226/107, BASF is enabling applications that require a high level of temperature resistance, e.g. e-coat processes, along with applications that need a modulus of stability over a wide range of usage temperatures. The material can be manufactured on pultrusion plants suitable for polyurethane with no need for further adjustments.

About BASF's Performance Materials division

BASF's Performance Materials division encompasses the entire materials know-how of BASF regarding innovative, customized plastics under one roof. Globally active in four major industry sectors – transportation, construction, industrial applications and consumer goods – the division has a strong portfolio of products and services combined with a deep understanding of application-oriented system solutions. Key drivers of profitability and growth are our close collaboration with customers and a clear focus on solutions. Strong capabilities in R&D provide the basis to develop innovative products and applications. In 2018, the Performance Materials division achieved global sales of €7.65 bn. More information online: www.plastics.basf.com

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of around €63 billion in 2018. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.