LANXESS at Chinaplas 2021

- Innovative solutions for engineering plastics, flame retardant plastics and plastics coloring
- Attractive virtual program with live booth tours and technical webinars

Cologne/Shanghai, April 12, 2021 – German specialty chemicals company LANXESS is exhibiting at Chinaplas 2021 in Shenzhen from April 13-16, 2021. The business units High Performance Materials (HPM), Polymer Additives (PLA) and Inorganic Pigments (IPG) are showcasing new products, technologies and solutions regarding engineering plastics, flame retardant plastics and plastics coloring.

As some customers cannot visit the trade fair this year due to the ongoing coronavirus pandemic, LANXESS offers diverse opportunities for virtual participation. These include online booth tour broadcasts and technical webinars in both English and Chinese. Visitors can access the virtual program through the following links:


Chinese event page: http://chinaplaslanxess.tbpchina.com/cn_index.html

Cost savings and excellent performance

Over the past three years, polyamide 66 (PA66) has become increasingly expensive due to shortages of the raw material adiponitrile (ADN). This has prompted manufacturers of plastic components to seek more affordable and reliably available alternatives to PA66. LANXESS will exhibit and introduce its cost-effective, stable and high-quality alternatives based on polyamide 6 (PA6).
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The company expects that China will develop rapidly in the fields of new mobility, including lightweight, e-mobility and hydrogen energy, as well as infrastructure, 5G and consumer goods applications. High-performance materials from LANXESS can meet the requirements of these industries. With two production sites in China, the company is well prepared to meet these market needs.

With its Durethan (polyamide), Pocan (PBT) and Tepex (thermoplastic composite) brand products, LANXESS HPM exhibits a series of solutions in the field of new energy vehicles. Relying on its high rigidity and strength, Durethan BKV45FN04 becomes an ideal choice for the production of cell components, such as frames and end plates, and high-voltage connectors. The product also adopts the latest FR and thermal stability package, so that it has excellent outgassing and frosting properties, long-term thermal stability, and surface quality.

On the basis of Tepex continuous fiber reinforced thermoplastics (CFRTP), LANXESS has also developed parts which are cost-effective and suitable for mass production and can be used in the manufacture of parts such as front end components, bottom panels, bumper beams, brake pedals, full-load loading systems and fuel tank reinforcing. Due to its multiple functions and excellent performance, Tepex fits the current development trends of new energy vehicles, such as environmental mobility, personalized design, safety and durability, as well as the sustainable resource and environmental protection solutions.

More stable and safer polymer additives

LANXESS also exhibits a broad range of additives products, including brominated flame retardants, phosphorus-based flame retardants, eco-friendly plasticizers, and colorant additives. LANXESS PLA offers multiple products for PU and PVC. Armgard, Levagard, Disflamoll and Reofos are used to manufacture flame retardant products, including insulating materials, cables, printed
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circuit boards, foil papers, tarpaulins, floor coverings, bases and other fireproof products.

LANXESS also exhibits its solution designed for replacing the flame retardant HBCD. HBCD is included in the Stockholm Convention on Persistent Organic Pollutants and its production and use will be prohibited in China from December 25, 2021. The polymeric macromolecule flame retardant Emerald Innovation 3000 from LANXESS offers an efficient and sustainable replacement for HBCD in EPS and XPS thermal insulation materials used in the construction industry.

The Macrolex solvent dyes of LANXESS feature high thermal stability, excellent light resistance and weather resistance, high coloring intensity, and outstanding brightness and work well for the coloring of amorphous thermoplastic plastics such as polystyrene, polycarbonate, polymethyl methacrylate and polyethylene terephthalate. The soluble organic dye range Macrolex provides an innovative coloring technique for plastics. They have excellent dyeing properties and machinability, meet high ecological standards, and are widely applied in such fields as coloring of beverage bottles, ink for ink-jet printers and LCD color filters.

Macrollex Orange HT is one of the highlights this year. In e-mobility, orange color as a safety feature is mandatory for high voltage plastic components. The comprehensive properties of Macrollex Orange HT can well serve the needs of safety and performance for electric cars, including excellent heat stability, improved sublimation resistance, high migration stability, high color strength and high light fastness.

**Optimized price–performance ratio for coloring high-temperature plastics**

LANXESS IPG has expanded its Colortherm Yellow pigment range for heat-resistant high-performance plastics. Two new inorganic yellow pigments are now available, namely Colortherm Yellow 5 and
Colortherm Yellow 26. They are based on iron oxide and zinc oxide respectively and specially designed for cost-effective coloration in a temperature range of between 220 °C and 260 °C. With equally high color strength at the same color space, they offer plastics manufacturers and processors an excellent compromise between the best-in-class Colortherm Yellow 20 and Colortherm Yellow 30 products, which are heat stable up to 300 °C.

Plastics can now be used in applications that would have been considered impossible just a few years ago. High-performance polymers with special physical or chemical properties are increasingly replacing metal, glass and ceramics. They are used for special applications in vehicles, electronics and process engineering as well as medical applications. As the use of technical plastics in high-tech applications becomes more widespread, the requirement profile for the pigments used for coloring is also growing. In particular, the heat stability of the colorants is becoming a decisive quality factor. In the case of organic pigments, high processing temperatures often lead to accelerated decomposition; but inorganic alternatives can be subject to color variations at temperatures above 180 °C.

For reliable yellow coloring of high-temperature polymers, LANXESS offers the modular Colortherm Yellow product range. It comprises the iron oxides the Colortherm Yellow 5 and Colortherm Yellow 20 iron oxides as well as Colortherm Yellow 26, Colortherm Yellow 30 and Colortherm Yellow 3950 zinc ferrites. The range covers not only the color spectrum of light, saturated yellow shades but also orange tones. Plastic formulations can thus be easily realized at processing temperatures of up to 300 °C.

Due to their special manufacturing process, the color strength of the zinc ferrites Colortherm Yellow 26 and Colortherm Yellow 30 is up to 20 percent higher than comparable products. This means a corresponding lower level of pigment addition is required to color the plastic.
Thanks to an extensively equipped plastics technical center, LANXESS is able to provide customers with comprehensive advice in the use of its pigments. Its services also include analyzing thermal stability in customer-specific plastics applications.

Chinaplas 2021 takes place at Shenzhen International Exhibition Center. In 16 exhibition halls, the trade fair spreads over a total area of 350,000 square meters. More than 3,600 global high-quality suppliers attract a large number of Chinese and overseas professional visitors from different rubber and plastic application sectors.
LANXESS is a leading specialty chemicals company with sales of EUR 6.1 billion in 2020. The company currently has about 14,300 employees in 33 countries. The core business of LANXESS is the development, manufacturing and marketing of chemical intermediates, additives, specialty chemicals and plastics. LANXESS is listed in the leading sustainability indices Dow Jones Sustainability Index (DJSI World and Europe) and FTSE4Good.

Forward-Looking Statements
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