

## Press release

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### **Heraeus offers first antistatic coating that protects lighting units in electrostatic discharged and explosion-proof areas**

**Based on the conductive polymer Clevios, Heraeus Epurio and Plast Composite Consulting (PCC) have developed a coating for lighting-unit covers in electrostatic discharge (ESD) and explosion-proof areas. This is the first coating to combine conductivity with transparent surface sealing.**

In ESD environments or areas with an explosion hazard, the requirements placed on lighting units are extremely high. They must remain durably resistant to chemicals and scratches - and reliably dissipate static charges. In cooperation with PCC, Heraeus business unit Epurio introduces the first coating that contains Clevios – a conductive polymer – for sealing plastic covers of lighting units. This offers all-round protection, is transparent and cost-effective to manufacture.

"Our solution is unique in this combination and quality," says Wilfried Lövenich, Head of Innovation at Heraeus Epurio. Clevios is a conductive polymer additive that is suitable for various plastics such as PC, ABS, PMMA and SAN. The additive gives the coated material its dissipative properties so that no static charges can arise that could, in the worst case, cause sparks and thus an explosion hazard.

### **Easy to use for outstanding properties**

The Clevios coating can be applied to plastic surfaces using all conventional methods, after which the components are dried. Surfaces coated with Clevios become antistatic, static dissipative or conductive – with precisely adjustable coating resistances. "For the first time, Clevios makes it possible to give a 3-D plastic body a glass-like surface that is also highly conductive," explains Lövenich. "Compared to the possibilities offered by current substrates, the new property profile of the Clevios-based coating represents a big step forward in materials technology."

### **Combined know-how**

PCC is an expert in plastic coatings and a long-standing partner of Heraeus in the field of coatings for automotive parts. The idea for the new coating developed from cooperation on existing products. "We combined Heraeus' knowledge of conductive polymers with our expertise in chemical resistance and scratch resistance," explains Carolus Bremer, Managing Director of PCC.

The new formulation is an important addition to Clevios' existing portfolio. As an established product for application in windows, instrument housings, special papers, photographic films, construction and building materials, release coatings, it is now also used in lighting units - with potential for future developments. "Thanks to its special composition, Clevios is very flexible and can be adapted to a wide range of customer requirements - whether it be conductivity, coloring or other application areas," says Lövenich.

For further information please visit Heraeus at the LOPEC exhibition in Munich: 19 - 21 March 2019, Hall B0 Stand 316.

#### **About PCC**

PCC develops functional coatings for plastic surfaces for almost all industrial sectors - either as licensed products or produced in-house to order. [www.pcc-online.de](http://www.pcc-online.de)

#### **About Heraeus Epurio**

Heraeus Epurio is the technology and market leader in essential materials for capacitor, display, and photoresist applications. Our pioneering product PEDOT, commercially known as Clevios™, is the standard for conductive polymers with over 30 years of demonstrated success. Our ultra-pure specialty chemicals are a critical component in the semiconductor, display, electronics, and aerospace industries.

#### **About Heraeus**

A globally leading technology group, Heraeus is headquartered in Hanau, Germany. Founded in 1851, it is a family-owned portfolio company which traces its roots back to a pharmacy opened by the family in 1660. Today, Heraeus combines businesses in the environmental, energy, electronics, health, mobility and industrial applications sectors.

In the 2017 financial year, Heraeus generated revenues of €21.8 billion. With approximately 13.000 employees in 40 countries, the FORTUNE Global 500-listed company holds a leading position in its global markets. Heraeus is one of the top 10 family-owned companies in Germany.

With technical expertise, a commitment to excellence, a focus on innovation and entrepreneurial leadership, we are constantly striving to improve our performance. We create high-quality solutions for our clients and strengthen their long-term competitiveness by combining unique material expertise with leadership in technology.

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Two lighting-units for ESD and explosion proof covered with Clevios-based PCC coating.