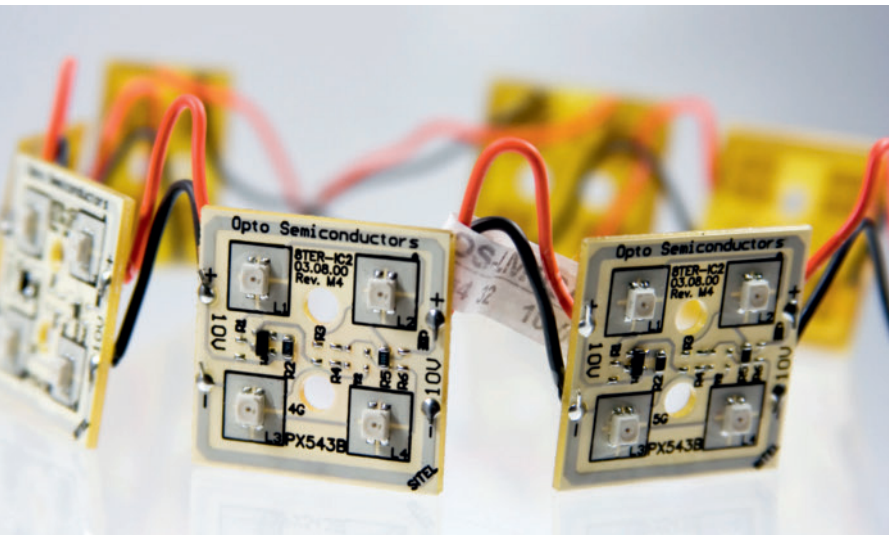
Polyphthalamide. A newly developed polyphthalamide is very suitable for high-temperature applications in both automotive construction and the electrical/electronics sector. It also offers environmental advantages thanks to its content of renewable resources. The new material can be readily processed by injection molding and extrusion.

Eco-Friendly and Versatile



Thanks to its high reflectivity and heat resistance, a newly developed, low-moisture polyphthalamide based on castor oil is also suitable for LED housings

Ems-Grivory in Dornat/Ems, Switzerland, has developed a new high-performance, semi-crystalline, partially aromatic polyamide based on PPA (polyphthalamide; Grivory HT3). This sustainable material has an enhanced performance spectrum in terms of moisture absorption, hydrolytic stability and ductility, while also offering excellent fuel barrier properties. It is therefore highly suitable for use in media lines in the automotive sector.

Grivory HT3 is largely based on a renewable raw material derived from the castor oil plant and therefore saves fossil fuels. After use, the only CO_2 released is the content that the castor oil plant has taken out of the atmosphere during its growth phase.

High Performance Spectrum

The very high ductility of the material is reflected in its advantageous elongation at break and toughness values. Even long-term exposure to moisture and high temperature has only a minimal effect on these properties. The newly developed Grivory HT3 absorbs even less moisture than its sister products Grivory HT1 and Grivory HT2.

The melting point of the material is 295 °C and is therefore 10 to 30 °C below that of conventional high-temperature polyamides. It has high dimensional stability and low creep. It is very resistant to hydrolysis and chemicals and provides excellent surface quality, even with glass fiber reinforcement.

All grades of the Grivory HT product family can be supplied with halogen-free flame-retardant modification on request and are therefore optimized for the electrical/electronics industry. A comprehensive range of approvals for drinking water and food contact applications is also intended for Grivory HT3.

Thanks to its high melt strength, this PPA can be very successfully processed by extrusion. The unreinforced material is also suitable for injection molding, whereas this is only possible to a limited degree with Grivory HT1 and HT2. **GK**

▶ **www.emsgrivory.com**

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