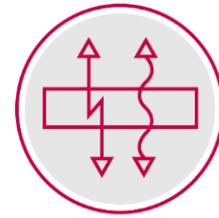




## LUVOCOM® TC

### Thermally conductive Compounds

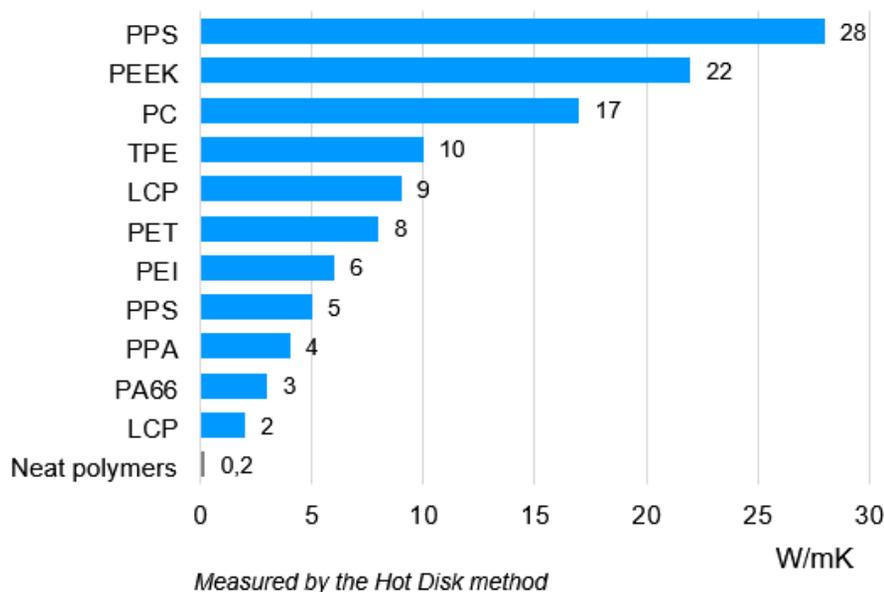
- Thermal conductivity up to 30 W/mK
- Design freedom and integrability
- Electrically conductive or insulating
- Weight and cost saving
- Customized solutions



CONDUCTIVE

Plastics are poor heat conductors. The thermal conductivity of polymers, including those with glass-fibre and carbon-fibre additives, lies between 0.1 and 0.4 W/mK. By including special additives, we are able to supply materials with more than 30 W/mK. Electrically conductive and electrically insulating products are also available.

Wherever it is necessary to avoid overheating, thermally conductive materials are in demand. In the electrical and electronics industries, the heat dissipation from casings used for coils or housings for hard discs and other mass data storage devices can be increased through the use of thermally conductive LUVOCOM® TC. The geometric design here is extremely flexible: during injection moulding cooling fin structures can be achieved to allow even components with complex shapes to be completely enclosed. In mechanical engineering LUVOCOM® TC is suitable for friction bearings and motor housings. And in the automotive sector, too, there are numerous possible applications for electronics components and lighting.



Up to 200 times higher thermal conductivity with LUVOCOM TC. Examples based on various polymers



Fastener for LED lamps  
Application: Lamp for medical sector  
Material: LUVOCOM TC based on PEI



**Solutions - Individually Engineered**

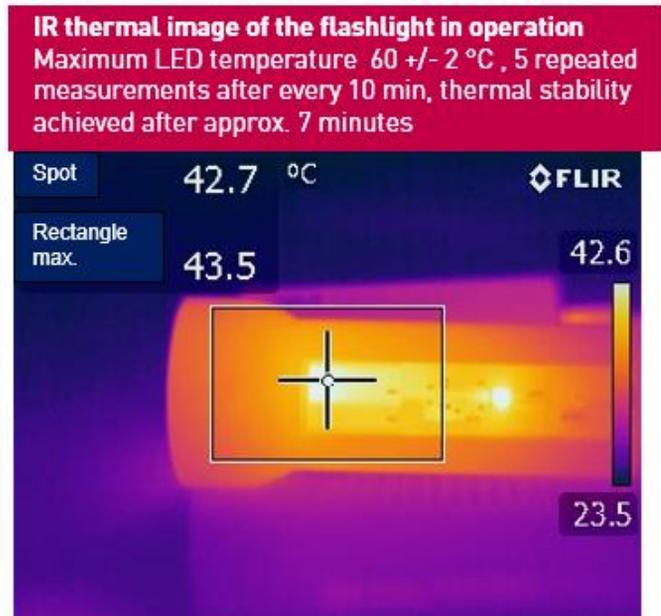
### Thermally conductive plastics bring a shine to LEDs

All over the world the use of lighting systems with LED (light emitting diodes) technology is on the increase. They can be found in applications such as automobiles and living areas. With the requirements of LED lamp manufacturers particularly in mind, Lehmann&Voss&Co. has developed new thermally conductive plastics, which are used here as heat sinks and enclosures.

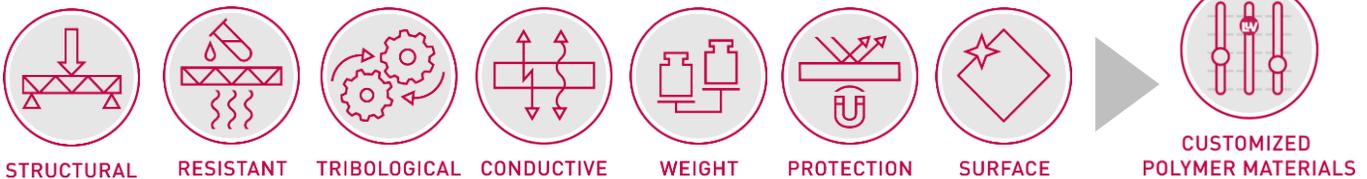
The materials are characterized by a specially adjusted thermal conductivity ranging from 0.6 to 8.0 W/mK, good strength figures, electrical insulation, a white coloration and optional flame retardation, tested to UL94 V0. PET, PA 6 and PC are the base polymers. Thanks to the customized properties of the materials, the lamps achieve a higher performance and service life, while the good processing characteristics permit freedom in design and allow cost savings compared with other materials such as metals and ceramics.



Flashlight with high-performance LED and integrated circuit board  
Material: LUVOCOM TC based on PET



### Our Material Competences



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