

GEHR PEEK-HT[®]

Product Pilot: Round rods made of a further thermally optimised PEEK

Innovation stimulates the market. One of our contributions to innovation is to extrude the new SOLVAY PEEK-HT material, which may be used in particular in the chemical industry.

With PEEK-HT, Solvay developed a new material which has a glass transition temperature (170 °C) and heat deflection temperature (HDT/A=175 °C) that are both approx. 20 °C higher than those of PEEK, without losing its high chemical resistance. This is usually the case with the materials from the same material family, such as PEK, PEKK or PEKEKK. The melting point of PEEK-HT is approx. 385 °C. At the same time, it was possible to significantly increase the dielectric strength from 16 to 23 kV/mm. The raw material manufacturer now specifies a compressive strength of 160 MPa compared to the former value of 118 MPa. The notched impact strength, measured according to ASTM D256, is also specified with an increased value of 106 J/m compared to 91 J/m for standard PEEK.



Properties:

- High chemical resistance (comparable to standard PEEK)
- Enhanced electrical properties (dielectric strength)
- Enhanced mechanical properties at higher temperatures
- Both heat deflection temperature and glass transition temperature are approximately 20 °C higher than those of standard PEEK

Applications:

Wherever higher safety is required compared to standard PEEK, or wherever enhanced electrical and thermal properties are indispensable and – until now – alternative solutions had to be found.