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PRESS INFORMATION

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Grilamid TR HT 200 in medical technology

Technical and optical excellence

Problems in medical technology are extremely varied, and this also applies to the different treatment and analysis equipment. Many of the devices used require transparent materials. Requirements with regard to repeated sterilization, however, severely restrict the choice of transparent polymers. The new Grilamid TR HT 200 is a real all-rounder - it can be steam sterilized many times at temperatures of 134°C and is resistant to disinfectants.

Grilamid TR is preferred for use in medical technology because it combines crystal-clear transparency with good resistance to chemicals and breaking. Until now, however, there have been limitations regarding resistance to superheated steam with temperatures above 100°C. This is precisely where the latest addition to the extensive product range comes in. Grilamid TR HT 200 is the world's first transparent polyamide that can be repeated steam sterilized at 134°C.

Varied application possibilities

Grilamid TR HT 200 has a glass transition temperature of 200°C and is particularly suitable for applications requiring high heat deflection temperatures. Despite this high glass transition temperature, the material has very balanced mechanical properties with regard to stiffness and ductility. Grilamid TR HT 200 was subjected to a test of several hundred steam cycles at 134°C without any visual impairment of the surface occurring. This creates many application possibilities, such as sterilizable boxes for instruments in doctors' surgeries, pipettes, reaction vessels, fluid connectors, pump housings and viewing windows in a varied range of devices.

Approvals for use in contact with foodstuffs and medical applications

Polymer materials used in medical technology should not contain bisphenol A or phthalates. Grilamid TR HT 200 does not contain any of these components and it complies with EU Regulation 10/2011 for polymers in contact with food. American FDA Approval has been applied for. Biocompatibility according to ISO 10993 1-20 specifies biological evaluation of the compatibility with humans. Grilamid TR HT 200 meets the requirements of ISO 10993-5 (cytotoxicity) and ISO 10993-10 (irritation and sensitization) and received a positive test report on USP Class VI.

Energy cost reduction during processing

Grivory TR HT 200 offers significant energy cost savings during processing compared to polyarylether sulfones (PSU, PESU and PPSU). The recommended melt temperatures for injection molding, mold temperatures as well as drying temperatures are significantly lower than for PSA, PESU and PPSU materials.

Conclusion

Thanks to its good sterilizability, Grilamid TR HT 200 enables a longer service life of equipment used in medical technology and energy savings during processing are significant.

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Grilamid TR is excellently suited for applications in medical technology. The new Grilamid TR HT 200 can be sterilized in several hundred sterilization cycles using super-heated steam at 134°C.



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