

## **PRESS INFORMATION**

---

### ***Pressemitteilung K 2019***

## **Grilamid TR – innovative material for medical applications**

**EMS-GRIVORY is market leader in the field of high-performance polyamides and sells a range of more than 100 products under the trade name Grilamid TR. The latest addition to this comprehensive product range is Grilamid TR FE 11292. This is the first transparent polyamide worldwide which can be repeatedly sterilised at temperatures of 134 °C using steam sterilisation processes, and which is therefore, particularly well-suited for use in medical applications.**

Polymers are today among the most often used materials in the field of medicine. Medical products made of polymer materials are very versatile. They are used, for example, for disposable articles such as syringes, containers, catheters and face masks as well as prostheses and implants. Medical instruments or certain components of these instruments are also made of polymer materials. Used in these innovative instruments, polymers make medical work easier. At the same time, they also contribute to safety of patients and doctors as they are resistant to breakage.

### **More plastic, more waste**

Conditions under which the polymers are used are often very demanding – surgical instruments for example, or applications involving direct contact with disinfectants or other chemicals. Demand for tailor-made polymer materials optimised for specific uses is steadily growing. On the downside, quantities of waste material to be disposed of has increased greatly due to the use of one-use articles. To counteract this, EMS- GRIVORY has developed a new transparent high-performance polymer which can be sterilised several hundred times and, therefore, is reusable.

### **Worldwide innovation from EMS-GRIVORY**

Reusable medical products or instruments do, however, involve a certain risk of cross-contamination. Steam sterilisation (also known as autoclave treatment) is a suitable method for safe sterilisation whereby saturated steam in a temperature range from 120 °C to 148 °C is used under high pressure for a stipulated length of time. It is for exactly this process that EMS-GRIVORY has developed the new

high-performance polyamide Grilamid TR FE 11292, which is suitable for repeated steam sterilisation.

This makes Grilamid TR FE 11292 the first transparent polyamide worldwide which can be repeatedly subjected to steam sterilisation at temperatures of 134 °C.

### **Reusable instead of disposable**

The field of use of the new Grilamid TR FE 11292 is greatly diversified. Due to its crystal-clear transparency, high mechanical strength and toughness as well as its good resistance to chemicals, Grilamid TR FE 11292 can be used for multiple applications requiring high transparency such as transparent pump holders, filters, steam valves, containers boxes and toolboxes, ventilation masks, sight windows and much more.

EMS-GRIVORY stands for reusable instead of disposable!

\* \* \* \* \*

*Pictures / Copyright: EMS-CHEMIE AG  
 Reproduction free of charge when source is named.*



*Grilamid TR is excellently suited for medical applications – the new grade Grilamid TR FE 11292 can also be used for applications involving repeated steam-sterilisation and, therefore, is reusable.*

| Freigaben    | TR 55 | TR 90 | TR 90 LXS | ICR 12 | TR 60 | TR FE 11292 |
|--------------|-------|-------|-----------|--------|-------|-------------|
| EU           | ✓     | ✓     | ✓         | ✓      | ✓     | n. a.       |
| FDA          | ✓     | ✓     | n. a.     | ✓      | ✓     | n. a.       |
| C-FDA        | ✓     | ✓     | n. a.     | n. a.  | ✓     | n. a.       |
| USP Class VI | ✓     | ✓     | n. a.     | ✓      | ✓     | ✓           |
| ISO 10993    | ✓     | ✓     | ✓         | ✓      | n. a. | ✓           |

*Certification of various Grilamid TR grades, all of which do not contain Bisphenol A or Bisphenol S.*

| Sterilisationsmittel                                | Parameter                | TR 55 | TR 60 | TR 90 | TR FE 11292 |
|---|--------------------------|-------|-------|-------|-------------|
| Ethylenoxid (EtO)                                   |                          | +     | +     | +     | +           |
| Gammastrahlung                                      | < 40 kGy                 | +     | +     | +     | +           |
| Wasserstoffperoxid (H <sub>2</sub> O <sub>2</sub> ) | 50 °C, 54 Minuten        | +     | +     | +     | +           |
| Dampfzyklen (> 500 Zyklen)                          | 134 °C, 7 Minuten, 90 °C |       |       |       | +           |

*An overview of the resistance of selected Grilamid TR grades to various sterilising agents.*



#### **Contact for technical inquiries**

Ronny Ebling

Product Manager Grilamid TR

EMS-GRIVORY

Tel.: +41 81 632 6241

E-Mail: [ronny.ebling@emsgrivory.com](mailto:ronny.ebling@emsgrivory.com)



#### **Contact for the press**

Lukas Aebersold

Deputy Head Communication

Tel.: +41 81 632 6568

E-Mail: [lukas.aebersold@emsgrivory.com](mailto:lukas.aebersold@emsgrivory.com)