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## **PRESSE INFORMATION**

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### **Significantly increased hydrolysis resistance**

**EMS-GRIVORY now offers highly hydrolysis resistant Grivory HT grades. These products are available with 40 and 50% glass-fibre reinforcement for applications in automotive construction, as well as for components in direct contact with drinking water and foodstuffs.**

The new Grivory HT products are a further development of Grivory HT1V FWA and Grivory HTV-HY grades and make applications involving exposure to hot water or steam, as well as water-glycol mixtures at even higher operating temperatures or with longer life expectancy possible (see diagrams 1 and 2). At the same time, fatigue strength values at the weld line have been improved (see diagram 3). Toughness and processability of these grades are comparable to those of the well-known products Grivory HT1V FWA and Grivory HTV-HY.

#### **Applications in direct contact with drinking water and foodstuffs**

Grivory HT XE 10811 with 40% and HT XE 10812 with 50% glass-fibre reinforcement have been developed for applications involving direct contact with drinking water and foodstuffs. These grades satisfy the drinking water requirements in Europe (KTR and DVGW W270, ACS, WRAS) and the USA (NSF 61) as well as food regulations in the EU and the USA (FDA).

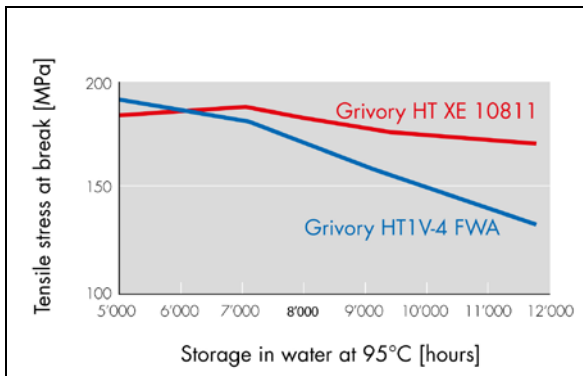
#### **Applications in automotive construction**

Grivory HT XE 10814 with 40% and Grivory HT XE 10815 with 50% glass-fibre reinforcement are available for applications in the field of automotive construction. Analogue to Grivory HT grades for applications in direct contact with drinking water and foodstuffs, these products are also halogen-free. In this way, the risk of contact corrosion from increased conductivity or creepage in moist environments is minimised.

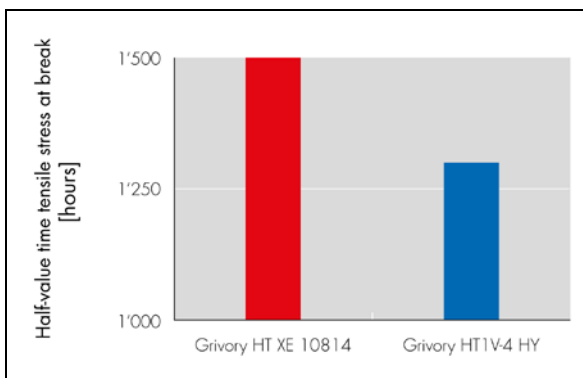
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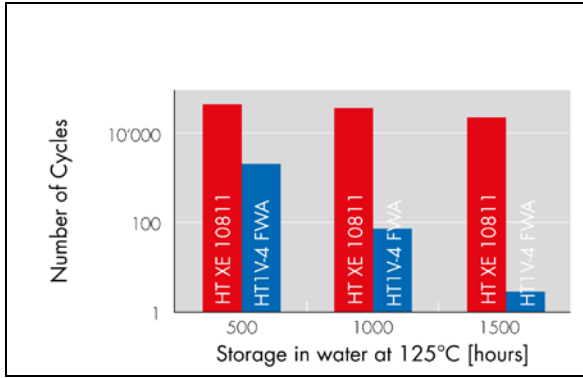
**Fig. 1:**  
 Coffee machine components must withstand a high number of loading cycles while exposed to hot water and steam.



**Diagram 1, Hydrolysis resistance:**  
 Tensile stress at break measured on 4 mm-thick test bars after storage in water at 95°C.



**Diagram 2, Resistance to Water/Glycol (G13):**  
 Half-value time for tensile stress at break measured on 4 mm-thick test bars after storage in a 1:1 water/glycol mixture at 135°C.



**Diagram 3:**

Test bars, 2 mm thick with weld lines, were stored in autoclaves in water at 125°C and then tested with a fatigue tension load of 2.5 to 25 MPa, 10Hz transverse to the weld line until breaking occurred.



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