SAERcore® with integrated LEO® fire protection. This SAERTEX® product consists of two layers of chopped strand mat (CSM) and an intelligent flow mesh. It achieves HL3 fire protection in accordance with EN 45545-2. SAERcore LEO offers the optimum solution, particularly for painted components in the interior of rail vehicles.

1. **Safety and fire protection in accordance with EN 45545-2 for painted components**
   - Fulfills the legal requirements for fire protection in rail vehicles // Verifiable for hazard levels HL2 and HL3 // Halogen-free // Lower combustibility without compromising drapability and weight.

2. **Easy to work with and drape**
   - Rapid wet-out and homogeneous impregnation in the RTM and RTM Light processes // Ideal for interior components with complex shapes and high surface quality requirements.

3. **Intelligent flow mesh for resins with high viscosities**
   - Modified polypropylene core for resins with high viscosities of 500 to 1000 mPas // No filtration of ATH fillers.

4. **Self-adhesive in combination with SAERfix®**
   - Solve the challenge of application with dry Gelcoat // Enables optimum molding and positioning, even for vertical surfaces.

5. **Everything from a single supplier**
   - Whether it is an interior or structural component with fire protection: Different issues, diverse solutions, single point of contact // Experts in fire protection with SAERTEX LEO® series // SAERcore LEO, LEO COATED FABRIC, LEO system.

6. **Worldwide availability**
   - Global production network with 14 locations in 10 countries on 5 continents.
**FIRE TEST RESULTS EN 45545-2 FOR R1**

**TEST PROCEDURE**

<table>
<thead>
<tr>
<th>Process</th>
<th>Test Value</th>
<th>Requirements for hazard levels</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 5658-2</td>
<td>CFE [kW/m²]</td>
<td>≥20</td>
<td>25.4</td>
</tr>
<tr>
<td>Spread of flame</td>
<td></td>
<td>≥20</td>
<td></td>
</tr>
<tr>
<td>ISO 5660-1</td>
<td>MARHE [kW/m²]</td>
<td>≤90</td>
<td>51.9</td>
</tr>
<tr>
<td>Rate of heat emission</td>
<td></td>
<td>≤60</td>
<td></td>
</tr>
<tr>
<td>DIN EN ISO 5659-2</td>
<td>Dₜ, (4)</td>
<td>≤300</td>
<td>79</td>
</tr>
<tr>
<td>Optical density of smoke</td>
<td>Dₚ, (min)</td>
<td>≤600</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>VOFₜ</td>
<td>≤600</td>
<td>198</td>
</tr>
</tbody>
</table>

Test set-up: SAERcore UFR 750/PP24/750 // Mäder paint // BÜFA-Firestop GCS 285 // BÜFA-Firestop 8175-W1 // Further fire test results on request

**TECHNICAL DATA**

**SAERcore LEO**

- Process: RTM, RTM Light process
- CSM per layer [g/m²]: 450, 600, 750
- Cavity (with Gelcoat) [mm]: 2.5–3, 3–3.5, 3.5–4
- Flow mesh: PP24 = 240 g/m²
- Widths: Standards 1250 mm, 2500 mm
- Individual tapes: On request
- EXTRAS: Kits (from template or CAD file), SAERfix (self-adhesive)
- Mechanical properties:
  - Tensile test DIN EN ISO 527-4: Modulus of elasticity in tension 11 GPa, Tensile strength 75 MPa
  - Bending test DIN EN ISO 14125: Modulus of elasticity in bending 9.6 GPa, Bending strength 220 MPa

*Test set-up: SAERcore LEO 750/PP24/750 // Crestapol 1211 // Fireguard 78 pa

**How it works**

First the resin flows into the core material (the resin flow zone) – horizontal injection

Then the resin impregnates the outer reinforcements – vertical injection

**ATH filler**

**REINFORCING YOUR IDEAS**

For application examples and further information, visit www.saertex.com/leo