Your partner in

**ELTEX® CAP504HR**

Higher rigidity for further lightweighting
The latest
Superstress grade
with enhanced rigidity
and excellent ESCR

INEOS Olefins & Polymers Europe
ELTEX® Superstress™
CAP504HR Series

Product features

/ High rigidity
/ Excellent stress cracking resistance
/ Good injectability
/ Improved rigidity/ESCR/injectability balance
/ Excellent quality controlled organoleptic properties
/ Satisfying the most stringent brand owners' NIAS requirements

This new Superstress™ grade is intended for the production of last generation lightweight screw caps for the packaging of carbonated beverages.
Benefits for the customers

The newly developed ELTEX® Superstress™ CAP504HR produced with INEOS proprietary supported catalyst and process offers the following advantages:

/ Enhanced cap rigidity at same weight inducing:
   - less doming
   - less closure ovalization
   - higher strip torque

/ Lightweighting potential
   as a consequence of higher rigidity and excellent ESCR

/ Good processing performances

/ Innovative antioxidant formulation
   without critical Non Intentionally Added Substances
## Product Characteristics
Comparison with current INEOS HDPE Grades for carbonated Drinks

<table>
<thead>
<tr>
<th>Properties</th>
<th>Unit</th>
<th>Standard</th>
<th>CAP504HR</th>
<th>B4020N1331</th>
<th>CAP602</th>
<th>CAP508</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>kg/m³</td>
<td>ISO 1183-1 &amp; 1872-1</td>
<td>958</td>
<td>952</td>
<td>953</td>
<td>953</td>
</tr>
<tr>
<td>MI 190°C/2.16 kg</td>
<td>g/10 min</td>
<td>ISO 1133-1</td>
<td>0.6</td>
<td>2.2</td>
<td>0.8</td>
<td>1.8</td>
</tr>
<tr>
<td>HLMI 190°C/21.6 kg</td>
<td>g/10 min</td>
<td>ISO 1133-1</td>
<td>52</td>
<td>77</td>
<td>40</td>
<td>94</td>
</tr>
<tr>
<td>Top Plate Rigidity</td>
<td>N/mm</td>
<td>INEOS</td>
<td>38</td>
<td>27.5</td>
<td>32.5</td>
<td>32</td>
</tr>
<tr>
<td>ESCR on cap (6 bar/40°C/10% Igepal)</td>
<td>h</td>
<td>INEOS</td>
<td>47</td>
<td>16</td>
<td>65</td>
<td>32</td>
</tr>
<tr>
<td>Max injection pressure</td>
<td>bar</td>
<td>-</td>
<td>1660</td>
<td>1770</td>
<td>1860</td>
<td>1510</td>
</tr>
<tr>
<td>(on industrial caps injection machine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data not to be considered as specification

## ESCR – Density

![Graph showing ESCR vs Density for different materials](image-url)

**Superstress™**
- **CAP602 series**
- **CAP504HR series** (slip agent free/ erucamide/ behenamide)
- **CAP508 series**

**HD5211 series**, **HD5240GA-B**, **B4020 series**, **HD6070EA-B**

**Higher rigidity & ESCR**
About us

INEOS is one of the world’s largest chemical companies, founded in 1998. INEOS Olefins & Polymers Europe is a leading producer of olefins and polyolefins.

**INEOS Olefins & Polymers Europe** offers a full range of high value polyolefins solutions for market applications such as food and industrial packaging, pipe and automotive through dedicated sales, and technical service teams.

INEOS is a safe and environmentally responsible company. We are engaged in developing our sustainable agenda to improve our operations and to implement sustainable solutions for our customers. This includes products that offer lightweighting, energy efficiency, durability (extended lifetime) or conservation of resources. We care.

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