Your partner in
RIGIDEX® P
450-HP60
480-HP90
Thin wall injection moulding
A step change in high flow impact copolymers

INEOS Olefins & Polymers Europe
Rigidex® P 450-HP60 & 480-HP90

450-HP60 & 480-HP90

Product features

- Excellent fluidity
- Very good impact/stiffness balance
- Fast crystallisation and low warpage
- Antistatic
- Food contact approved

Rigidex® P 480-HP90 is manufactured with a non-phthalate based catalyst.
Benefits for the customers

Rigidex® P 450-HP60 and 480-HP90 from Innovene™ PP technology are high fluidity impact copolymer polypropylene grades developed for the moulding of articles with either very thin walls or complex geometries. They offer the following advantages for converters:

/ **Increased productivity**  
thanks to high fluidity (lower processing temperature) and high crystallisation rates, both of which allow for cycle time reduction

/ **Low warpage and shrinkage**  
resulting from the use of the latest generation of nucleating agent

/ **Lightweighting**  
as a consequence of an outstanding rigidity/impact balance
## Product Characteristics

<table>
<thead>
<tr>
<th>Properties</th>
<th>Standard</th>
<th>450-HP60</th>
<th>480-HP90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melt Index 230 °C/2.16 kg (g/10 min)</td>
<td>ISO 1133-1</td>
<td>60</td>
<td>90</td>
</tr>
<tr>
<td>Crystallization point (°C)</td>
<td>DSC, INEOS</td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Flexural Modulus (MPa)</td>
<td>ISO 178</td>
<td>1400</td>
<td>1350</td>
</tr>
<tr>
<td>N.Izod at RT (kJ/m²)</td>
<td>ISO 180/A</td>
<td>6.2</td>
<td>5.8</td>
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<tr>
<td>N.Izod at -20 °C (kJ/m²)</td>
<td>ISO 180/A</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>Multi axial impact strength -20 °C (J/mm)</td>
<td>ISO 6603-2</td>
<td>13.5</td>
<td>9</td>
</tr>
</tbody>
</table>

Data not to be considered as specification

## Rigidity/Impact Balance

**Comparison with competitive MFR 70 materials**

![Graph comparing Rigidity and Impact Balance](image-url)

- **Rigidex® P 480-HP90**
- **Rigidex® P 450-HP60**
- **Competition A MFR 70**
- **Competition B MFR 70**
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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