**Non-halogen phosphate ester mixture (FR-117HF)**

### Description
- **Product Name**: Non-halogen phosphate ester mixture (FR-117HF)
- **Equivalent Name**: Albermarle Antiblaze 117HF

### Application
FR-117HF is an additive non-halogen phosphate flame retardant used in flexible polyurethane foams, whose superiority is demonstrated in high efficiency and excellent non-scorching performance. It is recommended as flame retardant in flexible furniture and automotive foams.

### Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless Transparent Liquid.</td>
</tr>
<tr>
<td>Color (APHA)</td>
<td></td>
</tr>
<tr>
<td>Acidity (mg KOH/g)</td>
<td>0.2 max.</td>
</tr>
<tr>
<td>Phosphorus content (wt.% Theory)</td>
<td>9.6</td>
</tr>
<tr>
<td>Density (25 °C, g/cm³)</td>
<td>1.180 ± 0.005</td>
</tr>
<tr>
<td>Viscosity (25°C, mpa·s)</td>
<td>100-150</td>
</tr>
<tr>
<td>Water content (wt.%)</td>
<td>0.1 max.</td>
</tr>
</tbody>
</table>

These properties are typical but do not constitute a specification either in part or as a whole. Specification data is available on request from sales, customer service or customer technical service.

### Shipping Information
- **Transportation classification**: UN3082 Class 9
- **Packing**: 230kg/drum; 4 drums/pallet. Wrap & strap; 18.4mt/20'fcl.
  - 1000kg/IBC; 20mt/20'fcl.

### More information
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- **E-mail**: sales@oceanchem-group.com; oceanchem@126.com

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