**Description**

EPS F85B is a fast cycling, fire retardant moulding grade consisting of spherical polystyrene beads containing an internal flame retardant additive and pentane as the expansion agent.

**Typical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk density</td>
<td>kg/m³</td>
<td>± 620</td>
</tr>
<tr>
<td>Bead size class</td>
<td>mm</td>
<td>0.3 – 0.5</td>
</tr>
<tr>
<td>Bead size range &gt; 95% between</td>
<td>mm</td>
<td>0.21 – 0.6</td>
</tr>
<tr>
<td>Blowing agent</td>
<td>% wt</td>
<td>≥ 4.6</td>
</tr>
<tr>
<td>Minimum achievable density</td>
<td>kg/m³</td>
<td>22</td>
</tr>
<tr>
<td>Normal moulded density range</td>
<td>kg/m³</td>
<td>25 – 40</td>
</tr>
<tr>
<td>Reaction to fire (DIN 4102) (AFNOR P92-507)</td>
<td></td>
<td>B1 4 M1 5</td>
</tr>
</tbody>
</table>

**NOTES:**

1) Single stage pre-expansion in continuous expander at atmospheric pressure.
2) Whilst it is possible to operate outside the range shown for moulded density, the values stated assume a cost-optimised selection of processing conditions.
3) FMPA Uberwachung 2.801 certificate for foam thickness ≥10mm and density ≥35kg/m³.
4) PV M1 certificate N° 9030516 CEMAT/4 for foam thickness = 120mm at density ≥20kg/m³.

**Applications**

EPS F85B is used typically for producing thin wall contour mouldings such as ceiling tiles, moulded panels and decorative profiles.

Detailed processing advice is given in the EPS bulletins, available from your local NOVA Chemicals company.
EPS F85B (F843B)

Quality and source of manufacture

As NOVA Chemicals EPS F85B is a performance material, many attributes important to EPS users cannot be readily specified. To assure customers that the material delivered will be of a consistently high quality, the NOVA Chemicals EPS manufacturing facility has established effective quality control and management procedures, and holds certificate Qual/1992/741 in accordance with ISO 9002.

NOVA Chemicals EPS F85B is manufactured at Berre in France.

Packaging, storage and handling

Before handing, refer to the Safety Data Sheet.

EPS F85B is normally packed in 1000 kg net non-returnable semi-bulk containers, termed “Octabins”. To minimise loss of expansion agent, each octabin has a separate plastic film liner, tied at the neck. EPS beads should be stored in closed containers, preferably below 20°C. Processing performance deteriorates over time as storage temperature rises. The expansion agent, pentane, is flammable and can form ignitable concentrations in part-empty containers and storage hoppers. All possibility of ignition should be avoided and adequate floor-level ventilation provided in storage and processing areas.

Food contact

EPS F85B should not be used for food contact applications.

Please contact NOVA Chemicals Technical Service for further regulatory information.

Waste management

Many effective waste management options exist for EPS foam. Scrap foam can be mechanically recycled into new EPS mouldings, or via extrusion into polystyrene granulate or sheet material. When valid recycling options are exhausted, EPS can be incinerated as part of municipal solid waste in accordance with local regulations. This generates substantial amounts of energy, and thus saves on alternative fuels.

The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

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