

# powerpor® 2

## Technical data sheet | Revision: 06

### Description:

**powerpor® 2** is expandable polystyrene granulate (EPS) which can be processed into high-strength foam blocks or contour mouldings.

### Applications:

Contour mouldings and blocks made from **powerpor® 2** are processed into thermal insulation material for construction applications without special requirements concerning flame resistance.

**powerpor® 2** offers high mechanical strength and is thus the raw material of choice for construction contour mouldings (e.g. Hourdis, lay-in parts between girders in ceiling construction). In addition, large contour mouldings or cut-to-size blocks are also used for packaging applications.

<b>Density range:</b>	13 - 30 kg/m <sup>3</sup>
<b>Granulate geometry:</b>	bead-shaped granulate
<b>Typical granulate diameter:</b>	1.0 - 1.6 mm (> 95 % by weight)
<b>Pentane content</b> (at the time of packaging):	> 5.0 % by weight
<b>Water content</b> (at the time of packaging):	< 0.4 % by weight
<b>Color:</b>	white

### Packaging and storage:

**powerpor® 2** is shipped in octabins (height max. 192 cm) on wooden pallets (114x114 cm) containing 1,150 kg net of material. The octabins are not weather- or water-proof and must therefore not be exposed to outdoor conditions.

It is not recommended to stack octabins more than one layer high. In case of double-stacking octabins under controlled conditions, the recommendations laid out in the document „Instructions for stacking sunpor octabins“ must be followed.

In order to obtain the desired properties of **powerpor® 2**, the raw material should be stored below 20 °C and be processed within one month.

### Processing:

#### > Pre-expansion:

With discontinuously operating, state-of-the-art pre-expanders **powerpor® 2** can be pre-expanded to densities of approx. 15 kg/m<sup>3</sup>. Lower densities can be achieved by double pre-expansion or in optimized machines. **powerpor® 2** has been treated with an anti-static agent to prevent a build-up of electrostatic charge during transport of the expanded beads.

#### > Intermediate aging:

Intermediate aging should be between 10 and 48 hours.

#### > Moulding:

**powerpor® 2** can be processed in industry-standard block moulds and automatic moulding machines and provides optimum fusion properties within the specified density range.

### Shipping:

<b>UN-Number:</b>	2211
<b>Designation:</b>	Polymeric beads, expandable
<b>Class:</b>	9
<b>Packing Group:</b>	III ADR

### Safety instructions:

Flammable pentane-air mixtures may be generated during storage and processing of **powerpor® 2**. For this reason, adequate ventilation must be ensured (LEL pentane 1.3 % by volume).

The blowing agent pentane escapes relatively slowly from EPS foam blocks. Thus, when cutting recently moulded blocks, the formation of a flammable pentane-air mixture has to be anticipated.

In addition, all conceivable sources of ignition must be kept away, and the build-up of electric charges has to be prevented.