

# terrapor<sup>®</sup> 4

## Technical data sheet | Revision: 07

### Description:

**terrapor<sup>®</sup> 4** is expandable polystyrene granulate (EPS) which can be processed into perimeter insulation foam boards with reduced water absorption.

**terrapor<sup>®</sup> 4** contains polymeric flame retardant and is certified to DIN 4102/B1 and EN 13501-1 class E.

<b>Density range:</b>	22 - 40 kg/m <sup>3</sup>
<b>Granulate geometry:</b>	bead-shaped granulate
<b>Typical granulate diameter:</b>	0.3 - 0.8 mm (> 95 % by weight)
<b>Pentane content</b> (at the time of packaging):	> 5.5 % by weight
<b>Water content</b> (at the time of packaging):	< 0.4 % by weight
<b>Color:</b>	white

### Packaging and storage:

**terrapor<sup>®</sup> 4** is shipped in octabins (height max. 192 cm) on wooden pallets (114 x 114 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 **terrapor<sup>®</sup> 4**, 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 **terrapor<sup>®</sup> 4** can be pre-expanded to densities of approx. 20 kg/m<sup>3</sup>.

The special hydrophobic surface coating absorbs slightly less moisture during the pre-expansion process than standard EPS raw material. To prevent a build-up of static charge the pre-expanded beads should thus not be dried too much in the fluidised bed.

#### > Intermediate aging:

Intermediate aging should be between 10 and 48 hours.

#### > Moulding:

**terrapor<sup>®</sup> 4** can be processed in industry-standard block moulds and automatic moulding machines.

When **terrapor<sup>®</sup> 4** is moulded into foam boards used for direct water or moisture contact, best possible fusion must be ensured, since the degree of fusion is directly connected with water absorption.

### 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 **terrapor<sup>®</sup> 4**. 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.