

terrapor[®] 4

Technical data sheet | Revision: 06

Description:

terrapor[®] 4 is expandable polystyrene granulate (EPS) which can be processed into perimeter insulation foam boards with reduced water absorption.

terrapor[®] 4 contains polymeric flame retardant and is certified to DIN 4102/B1 and EN 13501-1 class E.

Density range:	22 - 40 kg/m ³
Granulate geometry:	bead-shaped granulate
Typical granulate diameter:	0.3 - 0.8 mm (> 95 % by weight)
Pentane content (at the time of packaging):	> 5,5 % by weight
Water content (at the time of packaging):	< 0,4 % by weight
Color:	white

Packaging and storage:

terrapor[®] 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. In order to obtain the desired properties of **terrapor[®] 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[®] 4** can be pre-expanded to densities of approx. 20 kg/m³.

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[®] 4 can be processed in industry-standard block moulds and automatic moulding machines.

When **terrapor[®] 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:

ADR-Marking:	Substance no. 2211 Polymeric beads, expandable
Class:	9
Packing Group:	III ADR

Safety instructions:

Flammable pentane-air mixtures may be generated during storage and processing of **powerpor[®] 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.