

powerpor[®] 3

Technical data sheet | Revision: 05

Description:

powerpor[®] 3 is an expandable polystyrene granulate (EPS) which can be processed into high-strength foam blocks or contour mouldings.

Applications:

Contour mouldings and blocks made from **powerpor[®] 3** are processed into thermal insulation material for construction applications without special requirements concerning flame resistance.

powerpor[®] 3 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.

Density range:	18 - 30 kg/m ³
Granulate geometry:	bead-shaped granulate
Typical granulate diameter:	0.7 - 1.1 mm (> 95 % by weight)
Pentane content (at the time of packaging):	> 5,0 % by weight
Water content (at the time of packaging):	< 0,4 % by weight
Color:	white

Packaging and storage:

powerpor[®] 3 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 **powerpor[®] 3**, 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[®] 3** can be pre-expanded to densities of approx. 15 kg/m³. Lower densities can be achieved by double pre-expansion or in optimized machines.

powerpor[®] 3 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[®] 3 can be processed in industry-standard block moulds and automatic moulding machines and provides optimum fusion properties within the specified density range.

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[®] 3**. 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.