

Powerpor 2[®]

Technical Notice

H-21-TM – Powerpor 2 Status: 02

Powerpor 2[®] is an expandable polystyrene granulate (EPS) which can be processed into high-strength foam blockware or contour mouldings.

Applications:

Contour mouldings and blockware 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.

Density range:

13 - 30 kg/m³

Granulate geometry:

Powerpor 2[®] is supplied as a bead-shaped granulate.

Granulate diameter:

1,0 - 1.6 mm (> 90% by weight)

Pentane content:

> 5.0% by weight (at the time of packaging)

Water content:

< 0.4% by weight (at the time of packaging)

Packaging and storage:

Powerpor 2[®] is shipped in octabins (height 176 cm) on wooden pallets (114 x 114 cm), containing 1150 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 2[®], the raw material should be stored below 20 °C and be processed within one month.

Processing:

Preexpansion:

With discontinuously operating, state-of-the-art preexpanders Powerpor 2[®] can be preexpanded to densities of approx. 15 kg/m³.

Lower densities can be achieved by double preexpansion or in optimized machines.

Powerpor 2[®] has been treated with an antistatic agent to prevent a buildup 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 blockmoulds 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 2[®]. For this reason adequate ventilation must be ensured (UEG 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 buildup of electric charges has to be prevented.

Please note:

This Technical Notice reflects our current knowledge.

The suitability for concrete applications must be verified by the processor in a technical and legal context.

Subject to technical changes.

