

Lambdapor[®] 750 premium

Technical data sheet

Description:

Lambdapor[®] 750 premium is an expandable polystyrene granulate (EPS) which can be converted into insulating boards with reduced thermal conductivity and a density below 18 kg/m³. Lambdapor[®] 750 premium contains a flame retardant and conforms to DIN 4102/B1.

Granulate geometry:

Screen limits: 1.0–2.4 mm
Typical bead size: 1.1–1.8 mm > 90 %

Pentane content:

Approx. 5% weight (at the time of packaging)

Water content:

< 0.3% weight

Colour:

The special infrared blocking additives cause the silvery colour of the prefoamed beads.

Packaging and storage:

Lambdapor[®] 750 premium is supplied in Oktabins (1,150 kg). The packaging is not rainproof and must therefore not be exposed to outdoor conditions. In order to obtain the desired properties of Lambdapor[®] 750 premium, the raw material should be stored below 20°C and be used up within a month.

Processing:

Preexpansion:

With discontinuously operating, state-of-the-art preexpanders Lambdapor[®] 750 premium can be preexpanded down to densities of approx. 16,5 kg/m³. To achieve lower densities, Lambdapor[®] 750 premium should be preexpanded in two stages.

Approach for 2 stage expansion:

1st Preexpansion:

We recommend an initial preexpansion of Lambdapor[®] 750 premium to 20–22 kg/m³ depending on the desired final density.

With batch preexpanders it is possible that the light sensors do not recognize the material in the preexpansion chamber because of its colour. This may lead to a failure of the automatic steam switch-off. To prevent this occurring the steaming time should be fixed or the sensor setting modified.

The intermediate storage time before the second preexpansion should be between 6 and 24 hours.

2nd Preexpansion:

The second preexpansion is usually carried out with continuously operating preexpanders. The minimum bulk density that can be achieved is approximately 11 kg/m³.

Intermediate storage:

Intermediate storage period should be between 8 and 24 hours.

Moulding:

Lambdapor® 750 premium can be processed on commercially available block moulds.

Steaming should be reduced compared to other EPS types as the usual steaming would result in extended cycle times. **Lambdapor® 750 premium** yields very well fused insulating boards, even with reduced steaming.

During the processing of **Lambdapor® 750 premium** small amounts of dust can be created by abrasion of the beads. As the dust is mainly originating from the preexpansion process appropriate measures have to be taken to extract the dust in the molders plant.

Cutting:

For hot wire cutting of the blocks the use of oscillating wires is recommended. All other settings can be the same as for white material. Prior to this operation the block should be stored for a sufficiently long period, to ensure that it is essentially free from pentane.

Shipping:

ADR-marking: substance no. 2211: Polymeric beads, expandable
Class: 9
Packing group: ADR

Safety instructions:

Flammable Pentane air mixtures may be generated during storage and processing of **Lambdapor® 750 premium**. Adequate ventilation must be ensured for this reason. All conceivable sources of ignition must therefore be kept away and the generation of electric charges prevented.

Packaging of boards from Lambdapor® 750 premium:

We recommend that **Lambdapor® 750 premium** boards are packed in opaque plastic film, as their exposure to direct sunlight can result in fading and distortion.

Please note:

This notice reflects our current knowledge. The suitability for concrete applications must be verified by the processor from a technical and legal point of view.

Subject to technical change.