

lambdapor[®] micro STD

Technical data sheet | Revision: 01

Description:

lambdapor[®] micro STD is an expandable polystyrene granulate (EPS) which can be converted into thin walled shape moulded parts with reduced thermal conductivity and densities between 20 – 30 kg/m³.

Density range:	20 - 30 kg/m ³
Granulate geometry:	bead-shaped granulate
Screen limits:	0.5 - 1.4 mm
Typical granulate diameter:	0.6 - 1.2 mm (> 90 % by weight)
Pentane content (at the time of packaging):	> 5.0 % by weight
Water content (at the time of packaging):	< 0.3 % by weight

Colour:

The special infrared blocking additives cause the grey colour of the pre-foamed beads.

Packaging and storage:

lambdapor[®] micro STD 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 **lambdapor[®] micro STD**, 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 **lambdapor[®] micro STD** can be pre-expanded down to densities of approx. 20 kg/m³.

With batch pre-expanders it is possible that the light sensors do not recognise the material in the pre-expansion 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.

> Intermediate aging:

Intermediate storage period should be between 8 and 24 hours.

> Moulding:

lambdapor[®] micro STD can be processed on commercially available shape moulding machines. Steaming should be reduced compared to other EPS types as the usual steaming would result in extended cycle times.

lambdapor[®] micro STD yields very well fused moulded parts, even with reduced steaming. During the processing of **lambdapor[®] micro STD** small amounts of dust can be created by abrasion of the beads.

As the dust is mainly originating from the pre-expansion process appropriate measures have to be taken to extract the dust in the moulders plant.

Shipping:

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

Packaging of boards/moulded parts:

We recommend that **lambdapor[®] micro STD** moulded parts are packed in opaque plastic film, as their exposure to direct sunlight can result in fading and distortion.

Safety instructions:

Flammable pentane-air mixtures may be generated during storage and processing of **lambdapor[®] micro STD**. For this reason, adequate ventilation must be ensured (LEL pentane 1.3 % by volume).

The blowing agent pentane escapes relatively slowly from EPS moulded parts. Thus, when cutting recently moulded parts, 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.