

# lambdapor<sup>®</sup> micro STD

## Technical data sheet | Revision: 01

### Description:

**lambdapor<sup>®</sup> 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/m<sup>3</sup>.

<b>Density range:</b>	20 - 30 kg/m <sup>3</sup>
<b>Granulate geometry:</b>	bead-shaped granulate
<b>Screen limits:</b>	0.5 - 1.4 mm
<b>Typical granulate diameter:</b>	0.6 - 1.2 mm (> 90 % by weight)
<b>Pentane content</b> (at the time of packaging):	> 5.0 % by weight
<b>Water content</b> (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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> micro STD** can be pre-expanded down to densities of approx. 20 kg/m<sup>3</sup>.

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<sup>®</sup> 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<sup>®</sup> micro STD** yields very well fused moulded parts, even with reduced steaming. During the processing of **lambdapor<sup>®</sup> 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:

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

### Packaging of boards/moulded parts:

We recommend that **lambdapor<sup>®</sup> 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<sup>®</sup> 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.