

lambdalit®

Technical data sheet | Revision 05 | April 2021

Description:

lambdalit® is a pre-expanded, ready for use polystyrene material, which can be processed into moulded parts with high mechanical strength and low thermal conductivity.

lambdalit® contains polymeric flame-retardant.

Available bulk densities:	Grade L230: 230 kg/m ³
	Grade L320: 320 kg/m ³
	Grade L410: 410 kg/m ³
Bead geometry:	spherical
Typical bead diameter: (> 90 % by weight)	Grade L230: 1.8 - 3.55 mm
	Grade L320: 1.8 - 3.15 mm
	Grade L410: 1.8 - 3.15 mm
Pentane content (at the time of packaging):	> 0.5 % by weight
Water content (at the time of packaging):	< 0.5 % by weight
Colour:	anthracite

Minor colour fluctuations between individual batches cannot be excluded.

Packaging and storage:

lambdalit® is shipped in octabins (height max. 192cm) on wooden pallets (114 x 114cm) :

	Octabin - kg (net)
Grade L230:	400
Grade L320:	600
Grade L410:	800

The octabins are not weather- or water-proof and must therefore not be exposed to outdoor conditions.

It is not recommended to stack octabins more than one layer high. In case of double-stacking octabins under controlled conditions, the recommendations laid out in the document „**Instructions for stacking sunpor octabins**“ must be followed.

In order to obtain the desired properties of **lambdalit®**, the material should be stored below 20 °C and be processed within three months.

Processing:

> Pre-expansion:

lambdalit® will be delivered as ready for use material in the defined density, therefore a pre-expansion of the material is not necessary.

> Moulding:

lambdalit® can be processed in industry standard automatic moulding machines. Compared with standard EPS, steaming should be increased because optimum fusion is only achieved at higher temperatures and steam pressures.

To prevent moulded parts from swelling a sufficient cooling period is essential. The higher the density the more heat energy can be stored in the moulded part, therefore longer cooling periods are necessary with increasing densities.

The final density of the moulded parts will be slightly higher than the bulk density of the material.

It is recommended to store plate-shaped parts direct after demoulding with spacer to each other to prevent reexpansion of polystyrene beads on the surface.

Shipping:

UN-Number:	2211
Designation:	Polymeric beads, expandable
Class:	9
Packing Group:	III ADR

Safety instructions:

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

The blowing agent pentane escapes relatively slowly from mouldings. 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.