

terrapor[®] 3

Technical data sheet | Revision 08 | January 2026

Description:

terrapor[®] 3 is an expandable polystyrene granulate (EPS) which can be converted into insulation boards.

terrapor[®] 3 contains polymeric flame retardant and is certified to DIN 4102/B1 and EN 13501-1 class E; to comply with these certification it must not be mixed with other materials.

Application:

terrapor[®] 3 can be processed to medium and high density blocks and molded parts, especially perimeter boards with reduced water absorption.

Density range:	20 - 40 kg/m ³
Granulate geometry:	spherical
Typical granulate diameter:	0.6 - 1.1 mm (> 95 % by weight)
Pentane content (at the time of packaging):	≈ 6.1 % by weight
Water content (at the time of packaging):	< 0.4 % by weight

- Colour:**
- > white
 - > blue
 - > green
 - > pink
 - > anthracite
 - > yellow

Packaging and storage:

terrapor[®] 3 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.

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 **terrapor[®] 3** the raw material should be stored below 20 °C and be processed within three months.

Processing:

> Pre-expansion:

terrapor[®] 3 can be pre-expanded with discontinuously operating, state-of-the-art pre-expanders in one or two steps.

Particularly low target densities can be achieved with two pre-expansion steps, whereby the density after first pre-expansion should be 1.5 times target density.

Intermediate storage time before second pre-expansion should be between 2 and 6 hours.

> Intermediate aging:

The intermediate maturing time depends on density after pre-expansion and ambient conditions in silo hall. Typical maturing times are between 10 and 48 hours. At higher densities, the maturing time can also be extended.

> Moulding:

terrapor[®] 3 can be processed on state-of-the-art block and shape molding machines. To achieve low water absorption (e.g. perimeter boards), the best possible fusion should be aimed for.

Cutting:

Before cutting, the blocks and molded parts should be stored for a sufficient long period to ensure that it is essentially free from pentane.

Packaging of boards:

Prolonged storage of **terrapor[®] 3** insulation boards in direct sunlight may cause the colour to fade. This effect can be minimized by packaging the boards in opaque film.

Shipping:

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

Recycling:

terrapor[®] 3 waste is suitable for mechanical recycling. Clean production waste can be used directly as regenerate in blocks; it is recommended to dedust the regenerate before use.

Safety instructions:

Flammable pentane-air mixtures may be generated during storage and processing of **terrapor[®] 3**. For this reason, adequate ventilation must be ensured (LEL pentane 1.3 % by volume).

The blowing agent pentane escapes relatively slowly from EPS foam blocks and molded parts. Thus, when cutting recently moulded blocks or molded 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. A smoking ban must be observed at all costs!

Appropriate extraction must be provided when cutting the blocks and molded parts, as the vapours produced contain small amounts of styrene in addition to pentane. The regionally applicable occupational exposure limits must always be observed.

Further information can be found in the **safety data sheet** (see www.sunpor.at/en/downloads/safety-data-sheet).

Please note:

This technical data sheet reflects our current knowledge and experience. Certain properties or the suitability for specific applications cannot be derived from the information provided and must be verified technically and legally by the processor. Subject to technical changes.