

suncolor[®] micro

Technical data sheet | Revision: 08

Description:

suncolor[®] micro is bulk-dyed, expandable polystyrene granulate (EPS), which can be processed into coloured, moulded parts with a density above 20 kg/m³. It is manufactured by an extrusion process.

Density range:	20 - 100 kg/m ³
Granulate geometry:	bead-shaped granulate
Typical granulate diameter:	0.6 - 1.2 mm
Pentane content (at the time of packaging):	> 4.5 % by weight
Water content (at the time of packaging):	< 0.3 % by weight

Colour:

- > **blue** (grade 741u)
- > **light blue** (grade 741Au)
- > **yellow** (grade 742u)
- > **green** (grade 743u)
- > **grey** (grade 744Au)
- > **brown** (grade 745u)
- > **olive** (grade 746u)
- > **anthracite** (grade 748u)

Minor colour fluctuations between individual batches cannot be excluded. Colour variation may also result from differences in the density of the foam.

By exposure to UV radiation coloured foam parts may be bleached. The suitability for certain applications has to be tested by the manufacturer of the final products.

Packaging and storage:

suncolor[®] micro is shipped in octabins (height max. 192 cm) on wooden pallets (114 x 114 cm) containing 1,150 kg or in corrugated metal drums containing 125 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 **suncolor[®] micro**, 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, **suncolor[®] micro** can be pre-expanded to densities of 20 - 100 kg/m³.

However, it is important that the pre-expanded beads are completely expelled from the pre-expander after each cycle because any beads remaining in the machine will become lighter in weight and in colour after repeated pre-expansion; this can lead to irregularities in the distribution of colour in the finished parts.

> Intermediate aging

The intermediate aging time should be minimum 24 hours.

At higher densities, the intermediate aging time may be prolonged without difficulty.

> Moulding:

suncolor[®] micro can be processed in industry standard automatic moulding machines.

Special steaming settings are not required. The cooling period should be longer than for other types of EPS to prevent the moulded parts from swelling.

Densities lower than 20 kg/m³ should not be used as this may lead to moulding difficulties (collapse of the moulded parts, difficulties with de-moulding, unsatisfactory foam quality).

Food packaging:

suncolor[®] micro is manufactured from polystyrene and additives which are suitable for production of food packaging in accordance with EU-directives. Checking the suitability of the packaging material for use with foodstuffs is the responsibility of the processor.

Shipping:

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

Safety instructions:

Flammable pentane-air mixtures may be generated during storage and processing of **suncolor[®] micro**. 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.