Foamlite®

Lightweight for greater benefits

Röchling Industrial
Lightweight for greater benefits

We have developed the closed-pore foamed material Foamlite® P especially for applications in which construction materials need to have a very low weight and have a high level of mechanical stability. This opens up a wide range of possibilities in lightweight design.

30 per cent lighter

Foamlite® P sheets are nearly 30 per cent lighter than comparable compact sheets. Depending on the application, the lightweight sheet saves on materials, conserves resources and is easy to handle. This gives you completely new possibilities in the design of your application and in dimensioning, as well as economic advantages.

30 per cent lighter:
The closed-pore foamed structure makes Foamlite® P a lightweight sheet.
Foamlite® P

Foamlite® P is a PP-C-based lightweight construction material. With a density of 0.65 g/cm³, Foamlite® P offers clear **weight advantages** over a sheet made of compact polypropylene at 0.915 g/cm³. The material also has an excellent combination of **toughness**, **high rigidity**, **strength** and chemical resistance. The surface is optionally available with a smooth finish or with a fine grain.

**Integrated hinge:** Foamlite® P has an „integrated” hinge. It is sufficient to mill a simple 90-degree V-notch into it. The high bending fatigue strength of the material means that the hinge can be folded more than 40,000 times without breaking.

**Sealable cutting edges:** The open-pored cutting edges of Foamlite® P can be sealed on request in order to cater for specific requirements in terms of appearance and hygiene.

### Technical data

<table>
<thead>
<tr>
<th>Properties</th>
<th>Testing method</th>
<th>Unit</th>
<th>Foamlite® P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>DIN EN ISO 1183-1</td>
<td>g/cm³</td>
<td>0.65</td>
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<tr>
<td>Moisture absorption</td>
<td>DIN EN ISO 62</td>
<td>%</td>
<td>&lt; 0.1</td>
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<tr>
<td>Modulus of elasticity</td>
<td>DIN EN ISO 527</td>
<td>MPa</td>
<td>1,100</td>
</tr>
<tr>
<td>Shore hardness</td>
<td>DIN EN ISO 868</td>
<td>Scale D</td>
<td>70</td>
</tr>
<tr>
<td>Operating temperature, long-term</td>
<td>Approximate values</td>
<td>°C</td>
<td>-10… 90</td>
</tr>
<tr>
<td>Operating temperature, short-term (max)</td>
<td>Approximate values</td>
<td>°C</td>
<td>150</td>
</tr>
<tr>
<td>Flammability</td>
<td>UL 94</td>
<td></td>
<td>HB</td>
</tr>
</tbody>
</table>
**Step safety**

Foamlite® P „cubic grain”

Foamlite® P is available in a slip-resistant design with the special „cubic grain“ surface structure. The three-dimensional, cube-shaped grain ensures a mechanical frictional connection between floor and shoe. The slip-resistant property of Foamlite® P „cubic grain“ is tested according to the following guidelines:

- **DIN 51097**: Testing of floor coverings; determination of the anti-slip properties; wet loaded barefoot areas
- **DIN 51130**: Testing of floor coverings; determination of the anti-slip properties; work rooms and work areas with slip risk

**Contact with food**

Foamlite® P FG blue

Foamlite® P FG blue is a special material for the food industry. It meets the requirements of EU Regulation 10/2011 – Plastic materials and articles intended to come into contact with food – as well as the requirements of the US Food and Drug Administration (FDA). Its UV resistance makes Foamlite® P FG blue suitable for use in industrial food areas with UV-based hygiene systems. The material is available in blue (RAL 5010). Further colours on request.

**Protection against electrostatic risks**

Foamlite® P AST

We have developed Foamlite® P AST especially for areas where there is a need for controlled conductance of electrostatic charge and low weight at the same time. High voltage pulses can arise with uncontrolled electrostatic discharge and destroy sensitive equipment, components and workpieces. With Foamlite® P AST, these components are protected by controlled conductance of the electrostatic charge.

**Foamlite® G**

Foamlite® G is a PE-HD-based lightweight sheet. With a density of 0.75 g/cm³, Foamlite® G has a weight advantage of more than 20 per cent compared with compact polyethylene at 0.95 g/cm³. The material boasts a superior surface quality, is optionally available with a smooth or grained finish and is very easy to process. At the same time, Foamlite® G can be welded with polyethylene (PE) very easily.

Further properties are possible upon request.
Your advantages at a glance

With its many and varied properties, Foamlite® offers you advantages in construction and handling compared with other materials:

**Low weight**
- Density: 0.65 g/cm³
- Approximately 30 per cent less weight than compact sheets
- Advantages in construction and dimensioning
- Easy handling

**Superior surface quality**
- Option of smooth surface or grained on both sides with high scratch resistance
- Slip-resistant surface „cubic grain“ available
- Long-lasting high-quality appearance

**Long service life**
- UV-resistant
- Virtually no water absorption
- No decomposition, rotting or delamination
- Long-term dimensional stability

**Easy processing**
- Easy to machine with woodworking tools
- Good welding properties
- Low internal stress

**High mechanical strength**
Very good combination of toughness and rigidity

**Good insulation properties**
Air bubbles in the foam core provide good thermal insulation and noise reduction

Production range

Foamlite® P can be produced in many sizes, thicknesses and colours and with different properties. We are happy to make a product tailored to your individual requirements.

**Dimensions:**
- Sheet thicknesses: 6 – 21 mm
- Widths: up to 2,000 mm
- Length: theoretically unlimited

**Colours:** Foamlite® P can be produced in virtually any shade on request.

Many product variants, dimensions and colours are available straight from stock!