Lightweight PVC free-foam sheets
SIMOPOR –
Proven PVC free-foam sheets reinvented

SIMONA’s new SIMOPOR product family unlocks new possibilities for creative designs in the field of visual communication and construction. From pure white to vibrant colours, from low flammability to light as a feather – our extended product range includes solutions tailored precisely to your projects.

Key areas of application
SIMOPOR sheets are the perfect choice for those fields of application in which lightweight design and aesthetics are of particular importance. Low weight translates into effortless handling – from initial transport to final finishing.

Areas of use:
- Exhibition and shop design
- Display design
- Printing sector
- Advertising signage
- Room installations
- Furniture making
- Construction and design

Benefiting from a clearly defined profile of properties, you are certain to find a suitable SIMOPOR sheet for your application in no time at all.

Focusing on quality
Our commitment to quality and our ambition to meet customers’ exacting demands are firmly enshrined within the company.

The development, production and delivery of our products are conducted in accordance with the strictest possible quality standards. Our integrated quality, environmental and energy management system has been certified in accordance with DIN EN ISO 9001, DIN EN ISO 14001 and DIN EN ISO 50001.

As a co-initiator and holder of the “PVC-Sheet Quality – Made in Germany” quality mark issued by the pro-K Industrial Association for Semi-Finished and Consumer Products made of Plastic, we have committed ourselves to exacting quality standards, in addition to ensuring the best possible manufacturing expertise and a premium-quality service.

During the manufacturing process our in-house digital printing machine produces test specimens on the basis of our white SIMOPOR sheets in order to assess and optimise the quality of our products.
Perfect products tailored to your requirements
Be as creative as you like – and put your trust in SIMONA to supply a product that allows you to bring your ideas to life. The new SIMOPOR range includes five different product types engineered for use in specific fields of application.

The thrill of colour
Even the slightest differences in hue can have a significant effect on print quality and a major impact on visual communication as a whole. Our SIMOPOR family includes three shades of white and six individual colours to ensure premium-quality results.

In tune with the environment
We love plastics. And our environment. For many decades now, we have been producing PVC sheets without hazardous lead stabilisers.
**SIMOPOR S**

**SMART**

Premium quality for the widest range of applications

SIMOPOR S is our smart allrounder for high-end results. Impressive technical properties combined with the benefits of excellent processability make SIMOPOR S the material of choice for a broad range of applications – from exhibition and shop design through to high-quality room installations. Thanks to its low flammability, this product also offers total peace of mind in those areas in which safety is paramount.

**Properties:**
- Best mechanical properties and excellent processing capabilities
- Low flammability – perfect for exhibition and display design
- Very good printability due to smooth surface
- Suitable for laminating and spray-painting
- Resilient, including outdoor applications
- Extensive range with excellent choice of thicknesses (1 to 19 mm)

**Colour:**
- Standard white

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**SIMOPOR SP**

**SMART PRINT**

**Colours come to life**

SIMOPOR SP has been designed specifically for digital direct printing. Boasting a unique formula, it delivers superb printing results with brilliant image reproduction. The smooth, finely structured surface finish facilitates ink acceptance even during high-speed processing.

**Properties:**
- Excellent printability on a wide range of flatbed printers
- Optimised shade of white for vibrant images in digital direct printing
- Excellent ink acceptance
- Suitable for all standard UV and solvent inks
- Very good processing properties
- High level of flatness
- Low flammability
- Suitable for laminating and spray-painting
- Very resilient, including outdoor applications

**Colour:**
- Functional white
  (optimised shade for digital printing)
Quality on a budget
E as in “Economical” – in SIMOPOR E, we have developed a particularly cost-effective solution for signage and short-term design applications. Due to their low weight, the sheets are easy to handle.

Properties:
- Cost-optimised quality for short-term applications
- Low weight
- Easy handling and processability
- Suitable for printing, laminating and spray-painting
- Suitable for temporary outdoor use

Colour:
- Standard white

Radiant prints at your fingertips
SIMOPOR EP is our lightweight alternative for print applications. Among its key features are its lightweight design and a pure white hue that will bring complete radiance to your images. This is the perfect choice when it comes to implementing your ideas in a cost-effective manner and experiencing the vibrancy of magnificent colours.

Properties:
- Very good printability thanks to brilliant shade of white
- Sharp image reproduction
- Suitable for all standard UV and solvent inks
- Low weight
- Good processing characteristics
- Simple handling
- Suitable for laminating and spray-painting
- Very resilient, including outdoor applications

Colour:
- Bright white
More colours, more possibilities
SIMOPOR-COLOR are through-coloured PVC free-foam sheets with a perfectly even surface finish. Available in six colours, they open up a wide range of possibilities for exhibition, signage and display design.

Properties:
- Wide range of colours
- Consistent colouring throughout the sheet
- Excellent mechanical properties and very good processability
- Very good surface quality
- Suitable for printing, laminating and spray-painting
- Resilient

Colours:
- Blue
- Yellow
- Green
- Grey
- Red
- Black

One product family – many processing options
Products within the SIMOPOR range can be easily processed using standard tools. Their dimensional stability is excellent.

- Sawing
- Bolting
- Drilling
- Milling
- Backing, laminating
- Water-jet cutting
- Glueing
- Warm bending
- Printing
- Spray-painting
- Die-cutting
SIMOPOR product range and material specifications

Product range
The choice is yours: standard SIMOPOR sheets are available in five different sizes.

<table>
<thead>
<tr>
<th>Extruded sheets (size/thickness in mm)</th>
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<tbody>
<tr>
<td>2,440 x 1,220</td>
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<tr>
<td>3,050 x 1,220</td>
</tr>
<tr>
<td>3,050 x 1,530</td>
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<tr>
<td>3,050 x 2,030</td>
</tr>
<tr>
<td>4,050 x 2,030</td>
</tr>
</tbody>
</table>

All dimensions specified are standard dimensions. Other sizes, thicknesses and colours available on request.

Products in various formats and thicknesses are available from stock. Please contact our sales department for further details concerning availability: sales@simona.de.

Material specifications
Our products are subjected to extensive technical assessments as well as endurance testing. Our in-house laboratory is responsible for testing all material specifications and long-term properties on a continual basis.

<table>
<thead>
<tr>
<th>Material specifications</th>
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<tbody>
<tr>
<td>Tensile modulus of elasticity, MPa, DIN EN ISO 527</td>
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<tr>
<td>900</td>
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<table>
<thead>
<tr>
<th>Flexural modulus of elasticity, MPa, DIN EN ISO 178</th>
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<tbody>
<tr>
<td>1,100</td>
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<table>
<thead>
<tr>
<th>Impact strength, kJ/m², DIN EN ISO 179</th>
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<tr>
<td>12</td>
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<table>
<thead>
<tr>
<th>Shore hardness D (15 s), DIN EN ISO 868</th>
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<tr>
<td>35</td>
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<table>
<thead>
<tr>
<th>Mean coefficient of linear thermal expansion, K⁻¹, ISO 11359-2</th>
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<tbody>
<tr>
<td>0.7 x 10⁻⁴</td>
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<table>
<thead>
<tr>
<th>Specific surface resistance, Ohm, DIN IEC 60093</th>
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<tr>
<td>≥ 10¹³</td>
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<tr>
<th>Fire behaviour</th>
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<tbody>
<tr>
<td>DIN 4102</td>
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<tr>
<td>B1: 1 to 19 mm *</td>
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<tr>
<td>NF P 92-501</td>
</tr>
<tr>
<td>M1: 3 to 10 mm *</td>
</tr>
<tr>
<td>DIN EN 13501-1</td>
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<tr>
<td>Euroclass B-s3-d0: 1 to 19 mm *</td>
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<tr>
<th>Temperature range, °C</th>
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<tbody>
<tr>
<td>0 to + 60</td>
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All specifications are deemed to be approximate values in respect of the specific material and may vary depending on the processing methods used. In general, data specified applies to average values measured on extruded sheets with a thickness of 4 mm. Deviations from the values specified are possible if the sheets in this thickness are not available. Information presented herein is not necessarily applicable to other products (e.g. pipes, solid rods) of the same material or products that have undergone downstream processing. Suitability of materials for a specific field of application must be assessed by the party responsible for processing or the end-user. All technical specifications presented herein are designed merely to provide assistance in terms of project planning. They do not constitute a guarantee of specific properties or qualities.
SIMONA is acknowledged as one of the leading producers and development partners in the field of semi-finished thermoplastics. Drawing on our outstanding abilities in process engineering, we specialise in the production of sheets, finished parts, profiles, welding rods, rods, pipes, fittings and values tailored to the most exacting standards.

You will be able to rely on our extensive know-how and high level of technical expertise in the field of polymer engineering. If you have any questions with regard to the processing of our products, please feel free to contact a staff member at our Technical Service Centre.

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