

# SIMONA



## SIMOLUX

Transparent PETG sheets

GLOBAL THERMOPLASTIC SOLUTIONS

# SIMOLUX – The essence of eye-catching design

SIMOLUX, the transparent, break-proof copolyester sheet made of PETG, is a true all-rounder. Combining high impact strength and excellent thermoforming properties with low flammability, SIMOLUX is the perfect material for a variety of applications.



Foto: Ernst Hombach GmbH & Co. KG

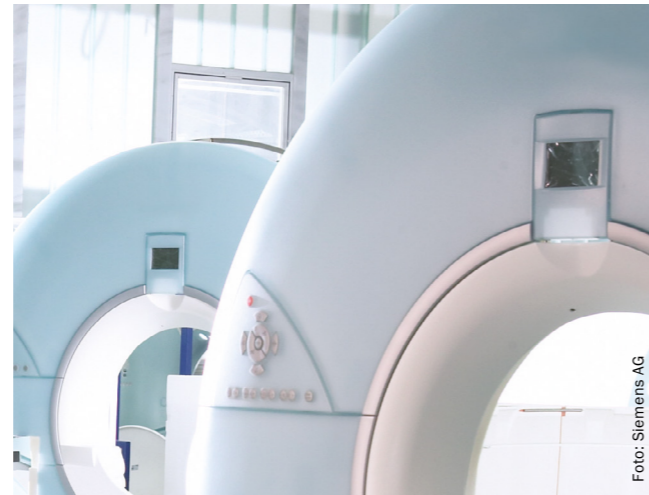


Foto: Siemens AG

SIMOLUX is a low-flammability product in accordance with DIN 4102 B1; it is available in a transparent, opal, satined or embossed design. SIMOLUX-UV is a UV-stabilised variant of the material.

### Versatile use

- Sales displays
- Illuminated signs
- Exhibition design
- Ceiling panels
- Machine covers
- Orthopaedics
- Engineering and design
- and more

### Excellent properties

- Low flammability (DIN 4102 B1)
- Crystal clear and ultra-transparent
- Excellent printability
- Dyeable
- Physiologically safe and food compliant
- Impact strength and fracture resistance
- Excellent thermoforming properties

### Superior processing options

	Sawing
	Bolting
	Drilling
	Milling
	Deep-drawing
	Laser cutting
	Water-jet cutting
	Gluing
	Warm bending
	Cold forming
	Printing
	Edge polishing
	Die-cutting
	Cutting
	Welding
	Backing, Laminating

### + Crystal clear

SIMOLUX sheets have a sophisticated appearance and a brilliant surface. On request, we can also make specific colour adjustments. The sheets are dyeable and can be used to create special lighting effects – perfect all-rounders when it comes to interior design.

### + Extreme impact resistance

SIMOLUX is a highly shatterproof material with excellent impact strength – even at sub-zero temperatures (down to -40 °C).

### + Efficient processing

SIMOLUX is highly versatile and efficient when it comes to handling and processing. The sheets have excellent thermoforming properties and, when stored in dry conditions, generally do not require pre-drying to avoid air bubbles in the thermoformed part.

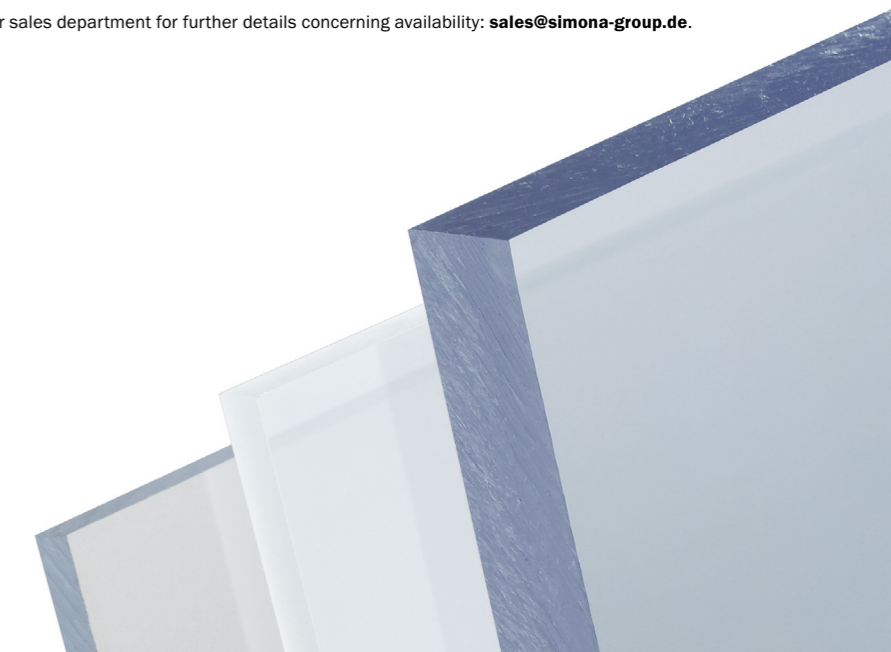


### Product range

		SIMOLUX	SIMOLUX opal
<b>Extruded sheets</b> (size   thickness in mm)			
	2000 x 1000	1 - 15	2 - 4
	2050 x 1250	1 - 12	2 - 4
	3050 x 1500	1.5 - 12	2 - 4
	3050 x 2050	2 - 10	2 - 4
	Colours	transparent	opal
<b>Welding rods</b>			
	Types	Round	-
	Thicknesses (in mm)	3 - 4	-
	Colours	transparent	-

The dimensions specified are standard dimensions. Other sizes and thicknesses as well as sheets made of SIMOLUX embossed, SIMOLUX satined and SIMOLUX-UV available on request.

Various sizes and thicknesses available from stock. Please contact our sales department for further details concerning availability: [sales@simona-group.de](mailto:sales@simona-group.de).



# SIMOLUX – Material specifications

## Material specifications

		SIMOLUX	SIMOLUX opal
Density, g/cm <sup>3</sup> , DIN EN ISO 1183		1,27	1,28
Yield stress, MPa, DIN EN ISO 527		52	52
Elongation at yield, %, DIN EN ISO 527		4,5	4,5
Tensile modulus of elasticity, MPa, DIN EN ISO 527		2000	2000
Notched impact strength, kJ/m <sup>2</sup> , DIN EN ISO 179		7,5	7
Dielectric strength, kV/mm, DIN IEC 60243-1		16	16
Shore hardness D (15 s), DIN EN ISO 868		78	78
Mean coefficient of linear thermal expansion, K <sup>-1</sup> , ISO 11359-2		0,7 x 10 <sup>-4</sup>	0,7 x 10 <sup>-4</sup>
Specific surface resistance, Ohm, DIN IEC 60093		≥10 <sup>13</sup>	≥10 <sup>13</sup>
Light transmission, %		90 (3mm)	20 (3mm)
Fire behaviour, DIN 4102		B1 low flammability: 1 to 8 mm (Test certificate available)	B1 low flammability: 1 to 8 mm (Test certificate available)
Temperature range, °C		-40 to +65	-40 to +65
Physiologically safe	BfR	✓	✓
Food conformity	EU	✓	-
	FDA	✓	✓

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. In the case of sheets manufactured by means of pressing, testing is generally performed on sheets with a thickness of 20 mm. Deviations from the values specified are possible if the sheets in this thickness are not available. In the case of backed sheets, all technical specifications relate to the non-backed base sheets. 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. For further information, please contact our Technical Service Centre at [tsc@simona.de](mailto:tsc@simona.de).

## GLOBAL THERMOPLASTIC SOLUTIONS

Contact and more:

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