

PLEXIGLAS® Mineral

PLEXIGLAS® Mineral NF

Product

PLEXIGLAS® Mineral NF is a modern mineral material (a combination of acrylic resin and mineral filler) whose attractive large sheet sizes open up new possibilities. PLEXIGLAS® Mineral NF is supplied complete with an elegant satin or gloss surface.

Properties

- 2D thermoforming at very narrow radii
- 3D thermoforming possible
- Can be seamlessly bonded
- “ready to install” surface
- Flame-retarded C, s1, d0 to EN 13501-1
- Large sheet sizes
- Wide selection of thicknesses
- Available in customer colors
- Improved chemical resistance
- Very high resistance to weathering and light
- Water-resistant
- Printable
- Easy-to-clean surface

Application

Owing to these properties, PLEXIGLAS® Mineral NF is suitable for both horizontal and vertical applications in indoor and outdoor areas.

Indoors

- Wall panels/wall protection
- Wet rooms: bathrooms and spas
- Shelves, window sills, furniture
- Displays, signs
- Platforms

Outdoors

- Facades/wall paneling
- Window sill and decor profiles
- Objects of all kinds

Processing

PLEXIGLAS® Mineral NF can be machined with all conventional woodworking and plastics processing machines. Carbide or diamond-tipped tools for optimized machining are available on the market.

- PLEXIGLAS® Mineral
Guidelines for Workshop Practice

Available formats

PLEXIGLAS® Mineral NF sheet sizes
3,050 x 2,030 mm (all thicknesses)
4,050 x 2,030 mm (12mm, 10mm on request)

Standard thicknesses: 6, 8, 10, 12mm
Special thicknesses: > 15mm on request

Physical properties

Typical values at 23°C and 50% RH

Mechanical	Values	Unit	Test standard
Flexural modulus of elasticity	min. 5,800	MPa	ISO 178
Flexural strength	min. 50	MPa	ISO 178
Elongation at break	max. 3.0	%	ISO 527-2/1B/5
Tensile strength	min. 21	MPa	ISO 527-2/1B/5
Impact stress large ball	>1,800	mm	EN 483-2
Density	1.74	g/cm ³	ISO 1183
Area weight	13.92	kg/m ²	at 8mm thickness
Thickness tolerances to ISO 19712	+ -1.0 + -0.8 + -1.0 + -1.2	mm mm mm mm	at 6mm thickness at 8mm thickness at 10mm thickness at 12mm thickness
Longitudinal distortion	≤ 1.9	mm/m	internal
Crosswise distortion	≤ 1.9	mm/m	internal

Physical properties

Typical values at 23°C and 50% RH

Thermal	Values	Unit	Test standard
Fire behavior	C s1 d0		DIN EN 13501-1
Fire behavior	B1		DIN 4102 Parte 1
Coefficient of linear thermal expansion	40 x 10 ⁻⁶ 0.4 mm/m/10°K	1/K	DIN 53752-A
Heat deflection temperature HDT	100-108	°C	ISO 75
Vicat softening temperature	>105	°C	ISO 306/B50
Forming temperature	140-160	°C	
Min. bending radius for thermoforming	four times	sheet thickness	internal

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Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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