

GRIPHEN™ FROST



GRIPHEN™ FROST is a superior designer material that combines the excellent fabrication and fire properties of PETG with the visual characteristics of satin PMMA and frosted glass. GRIPHEN™ FROST has more than five times the impact strength of standard PMMA and this property virtually eliminates breakage and failure during transport, fabrication and installation. Owing to this it makes GRIPHEN™ FROST a cost efficient product that saves time, labour and money. GRIPHEN™ FROST can be ordered in customized colours and sizes, giving the product endless possibilities...

Qualities:

- High impact strength compared to glass and PMMA
- Excellent matt surface that resists stains, grease and finger prints
- Retains matt surface even after thermoforming and fabrication
- Very easy to fabricate and screen-print
- Fire certificates:
 - B1 according to DIN 4102 for GRIPHEN™ FROST 2-8 mm thickness
 - B1 according to DIN 4102 for GRIPHEN™ FROST Opal 2-6 mm thickness
 - Class 1Y according to BS476 part 7 for GRIPHEN™ FROST 4 mm thickness
- Very easy to thermoform with fast thermoforming cycles
- No pre-drying required
- High resistance to chemicals but is easy to glue

Application areas:

The excellent properties of GRIPHEN™ FROST makes it a perfect solution in interior design, shop and fair building, displays and showcases applications.

GRIPHEN™ FROST Colour

GRIPHEN™ FROST Colour is the material for total Design Freedom. Arla Plast can provide GRIPHEN™ FROST in any colour upon request. Standard colours are Glass Tint, Opal 30 and Opal 80.

Available in:

GRIPHEN™ FROST is available in thickness 2-8 mm. Standard sizes in stock: 2050 x 3050. Special colours and sizes can be ordered to a minimum quantity.

GRIPHEN™ FROST is recommended for in-door applications and it is furthermore not recommended to be cold bent for aesthetical reasons.

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GRIPHEN™ FROST Properties

Property	Unit	Value	Standard
Physical properties			
Density	g/cm ³	1,27	ISO 1183
Gloss 3 mm Griphen Frost clear	%	12	60° mirror reflection black background
Water absorption 24 hours in water 23°C	%	0,2	ISO 62
Mechanical Properties			
Tensile strength at yield at break	N/mm ²	53	ISO 527
Elongation at yield at break	%	40	ISO 527
Elastic modulus	N/mm ²	2200	ISO 527
Charpy unnotched impact strength +23°C	kJ/m ²	no break	ISO 179/2D
Izod notched impact strength +23°C	kJ/m ²	11,5	ISO 180/1A
Izod notched impact strenght -30°C	kJ/m ²	4,4	ISO 180/1A
Rockwell hardness		R115	ISO 2039-2
Thermal Properties			
Linear coefficient of thermal expansion (-30-40°C)	mm/mm, K	5,1 x 10 ⁻⁵	ASTM D696
Heat deflection temperature, HDT A (1,80 N/mm ²) HDT B (0,45 N/mm ²)	°C	68	ISO 75
		72	
Thermal conductivity	W/m, K	0,19	DIN 52612
Fire Properties			
Fire classification for (4 mm)	Class	1Y	BS 476 part 7
Fire classification for (2-8 mm)	Class	B1	DIN 4102
Electrical Properties			
Volume resistivity, dry	Ω x cm	10 ¹⁵	IEC 93
Surface resistivity, dry	Ω	10 ¹⁶	IEC 93
Dielectric constant, dry 1 MHz		2,4	IEC 250
Dissipation factor (tan δ), dry 1 MHz		0,02	IEC250

The above information is based upon experience and given in good faith. Due to many factors which are outside our knowledge and control, no warranty is given or is to be implied with respect to such information. Spectar is a registered trademark of Eastman Chemical Company.

Arla sheets are produced from resins that are certified according to UL 94. Furthermore, several products have been tested according DIN 4102 (class B1 and B2), DIN 5510 (class S3, SR1 and SR 2, ST1 and ST2), BS 476 part 7 (class 1Y), NF P 92-501 (M2), CSE/75/A (class 1), CSE/RF/3/77 (class 1), UNE 23.727-90 (class M.4). A list of products that have been tested and their respective classification is presented on www.arlaplast.se. If information regarding classifications according to other standards is needed, it is often possible to retrieve information from our raw material suppliers. Please contact our technical support.