ICE polycarbonate sheet



ICE[™] UV – is an extruded polycarbonate sheet with an "ice" grain on one side and a smooth surface on the other side.

The "ice" grain gives a nice light diffusion with its structural appearance.

As standard we have put on UV protection on the sheet but it can of course also be ordered without UV protection.

It has the same properties as our other PC products as: superior impact strength, light weight compared to glass, can easily be formed and is usable over a wide temperature range.

Suitable application areas:

For internal and external lighting, glazing applications such as balcony glazing, shower cabins and bus shelters.

Delivery Programme

Standard size	1500 x 3050 mm
Max. Width	1500 mm
Tolerance, Length & Width	0/+3 mm
Thickness	3, 4 and 6 mm (5 and 8 mm on request)

Available dimensions in delivery programme are preliminary. Contact Arla Plast AB to check production possibilities for your specific project.

ARLA PLAST AB

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ICETM Properties

Property		Unit	Value	Standard	
Physical Properties s					
Density		g/cm³	1,20	ISO 1183	
Moisture absorption 24 hours, 23 °C, 50% RH		%	0,15		
Mechanical Properties					
Tensile strength at yield (at break)		N/mm ²	63(70)	ISO 527	
Elongation at yield (at break)		%	6(110)	ISO 527	
Elastic modulus		N/mm ²	2300	ISO 527	
Flexural modulus		N/mm ²	2300	ISO 178	
Charpy unnotched impact strength, 23 °C		kJ/m²	No break	ISO 179/2D	
Charpy unnotched impact strength, -40 °C		kJ/m²	No break	ISO 179/2D	
Izod notched impact strength 23 °C		kJ/m²	65	ISO 180/1A	
Izod notched impact strength -30 °C		kJ/m²	10	ISO 180/1A	
Rokwell hardness			M70	ISO 2039-2	
Thermal Properties					
Linear coefficient of thermal expansion (23-80 °C)		10 ^{-₄} x K ⁻¹	0,70		
Heat deflection temperature,	HDT A (1,80 N/ mm ²)	°C	132	ISO 75	
	HDT B (0,45 N/ mm ²)		142		
VICAT temperature	VST/B 120	°C	149	ISO 306	
	VST/B 50		148		
Specific heat capacity, Cp		KJ/kg/K	1,17	DIN 52612	
Thermal conductivity		W/m, K	0,21		
Fire Properties					
Fire classification according to UL94		Class	HB	UL94	
Electrical Properties					
Volume resistivity, dry		Ω x cm	10 ¹⁶	IEC 93	
Surface resistivity, dry		Ω	10 ¹⁵	IEC 93	
Dielectric strength, dry (1mm)		KV/mm	30	IEC 243	
Dielectric constant, dry	50 Hz		3,0	IEC 250	
	1MHz		2,9		
Dissipation factor (tan δ), dry	50 Hz		0,001	IEC 250	
	I MHz		0,010		

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.

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.