



# POLYCARBONATE SAPHIR<sup>®</sup> AS

POLYCARBONATE SAPHIR<sup>®</sup> AS is our range of polycarbonate coated sheet.

POLYCARBONATE SAPHIR<sup>®</sup> AS is an antistatic coated polycarbonate sheet with a unique protection against electrostatic charging.

POLYCARBONATE SAPHIR<sup>®</sup> AS is a polycarbonate sheet with a two side anti-static coating.

The coating gives an effective protection against electrostatic charging and prevents dust and dirt attraction.

POLYCARBONATE SAPHIR<sup>®</sup> AS prevents electrostatic discharge (ESD) and the high impact strength of polycarbonate is combined with excellent fire properties and optical clarity.

POLYCARBONATE SAPHIR<sup>®</sup> AS is to be used in flat applications.

## POLYCARBONATE SAPHIR<sup>®</sup> AS BENEFITS:

- Protection against electrostatic charging
- Prevent dust and dirt attraction
- Impact Resistant
- More than 10 times the impact strength of high impact PMMA

## APPLICATION AREAS:

POLYCARBONATE SAPHIR<sup>®</sup> AS is suitable for hoods and inspection glazing for testing equipment.

In applications where it is important to prevent electrostatic build up, such as explosive atmospheres.

## DELIVERY PROGRAM:

Standard size: 2000 x 3000 mm

Thickness range: 3 – 12 mm

2 sides coated

Special sizes and thicknesses on request.

## POLYCARBONATE SAPHIR® AS TYPICAL PROPERTY VALUES

Property	Value	Unit	Standard
<b>Physical properties</b>			
Density	1,2	g/cm <sup>3</sup>	ISO 1183
Refractive index (20 °C)	1,586		ISO 489
Moisture absorption 24 h, 23 °C, 50% RH	0,15	%	ISO 62
<b>Mechanical properties</b>			
Tensile strength at yield (at break)	60 (70)	N/mm <sup>2</sup>	ISO 527
Elongation at yield (at break)	6 (110)	%	ISO 527
Elastic modulus	>2300	N/mm <sup>2</sup>	ISO 527
Flexural modulus	>2300	N/mm <sup>2</sup>	ISO 178
Charpy unnotched impact strength -40 °C	NB	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength -30 °C	11	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength +23 °C	65	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength -30 °C	10	kJ/m <sup>2</sup>	ISO 180/1A
<b>Thermal properties</b>			
Coefficient of linear thermal expansion (20-70 °C)	65x10 <sup>-6</sup>	K <sup>-1</sup>	ISO 11359-2
Thermal conductivity	0,20	W/m.K	ISO 8302
<b>Optical properties</b>			
Colour	Clear (slightly blue)		
<b>Coating properties</b>			
Surface resistance	10 <sup>4</sup> – 10 <sup>8</sup>	Ω	ASTM D257
<b>Additional Information</b>			
The surface of the material should be grounded to allow static dissipation.			

Properties reported here are typical values for polycarbonate. Arla Plast makes no representation that the material in any particular shipment will conform exactly to the values given. 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. Detailed product specification and technical manual/information is available on request.