

# aria POLYCARBONATE **CLEAR FA**

POLYCARBONATE CLEAR FA is a clear transparent polycarbonate sheet. The product has high clarity and surface quality ideal to replace glass in food contact applications. The sheet is produced with vast knowledge of our production team extrusion experience.

POLYCARBONATE CLEAR FA provides specifiers with possibilities to use transparent polycarbonate sheets in applications where high clarity, high impact resistance and optical performance is required.

POLYCARBONATE CLEAR FA is an extruded polycarbonate sheet, made from resin complying with food contact regulations governed by the US Food and Drug Administration.

For applications within the EU, this product was until 2025 in accordance with (EU) N° 10/2011 but is no longer allowed for use as food contact material (FCM), except for professional use.

Our Declaration of Compliance (DoC) is available on request.

Sawing, forming and other fabrication can be performed by using the same methods as for standard polycarbonate.

Regulatory Notice: POLYCARBONATE CLEAR FA is produced using BPA-based polycarbonate resin, so technical unavoidable traces of BPA remain present. While the material remains compliant with U.S. FDA food contact regulations, it is no longer approved for use in general food contact applications within the European Union as of 2025, following updates to Regulation (EU) No. 10/2011. Limited professional or industrial uses may still be permitted where no direct consumer contact occurs, subject to a proper risk assessment.

#### POLYCARBONATE CLEAR FA BENEFITS:

- Food approval (FDA only, EU restricted)
- · Resistance to high temperature
- · Half the weight of glass
- · High impact strength
- · Easy to thermoform or fabricate

### **APPLICATION AREAS:**

POLYCARBONATE CLEAR FA is the right choice for professional use.as machine glazing, food packaging and other applications where the product will come in direct contact with food, such as displays and boxes

### **DELIVERY PROGRAM:**

Standard size: 2050 x 3050 mm

Thickness range: 0,8 - 12 mm

Colour: Clear

Special sizes, special thicknesses, and textures on

request

## POLYCARBONATE CLEAR FA TYPICAL PROPERTY VALUES

Property	Value	Unit	Standard
Physical properties			
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
Mechanical properties			
Tensile strength at yield (at break)	60 (70)	N/mm²	ISO 527
Elongation at yield (at break)	6 (110)	%	ISO 527
Elastic modulus	>2300	N/mm²	ISO 527
Flexural modulus	>2300	N/mm <sup>2</sup>	ISO 178
Charpy unnotched impact strength -40 °C	NB	kJ/m²	ISO 179/1eU
Charpy notched impact strength -30 °C	11	kJ/m²	ISO 179/1eA
Izod notched impact strength +23 °C	65	kJ/m²	ISO 180/1A
Izod notched impact strength -30 °C	10	kJ/m²	ISO 180/1A
Thermal properties			
Coefficient of linear thermal expansion (20-70 °C)	65x10 <sup>-6</sup>	K <sup>-1</sup>	ISO 11359-2
Heat deflection temperature, HDT A (1,80 N/mm²)	132	°C	ISO 75
Heat deflection temperature, HDT B (0,45 N/mm²)	142	°C	ISO 75
Vicat temperature VST/B 120	149	°C	ISO 306
Vicat temperature VST/B 50	148	°C	ISO 306
Thermal conductivity	0,20	W/m.K	ISO 8302
Electrical properties			
Volume resistivity, dry	>1014	Ω.m	IEC 62631
Surface resistivity, dry	10 <sup>16</sup>	Ω	IEC 62631
Dielectric strength, dry	30	kV/mm	IEC 60243
Dielectric constant, dry 50 Hz	3		IEC 62631
Dielectric constant, dry 1 MHz	2,9		IEC 62631
Dissipation factor (tan δ), dry 50 Hz	0,001		IEC 62631
Dissipation factor (tan δ), dry 1 MHz	0,01		IEC 62631

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.

