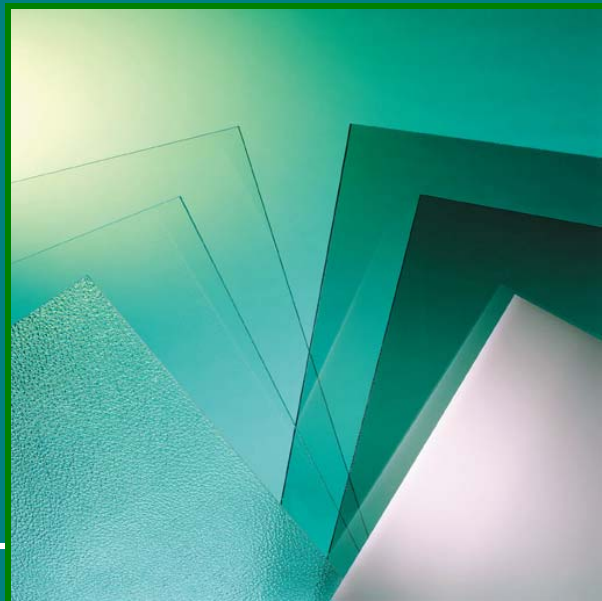


# BARLO<sup>®</sup> PC

OPAQUE  
Technical datasheet



## BARLO PC OPAQUE

### 1. PRODUCT IDENTIFICATION

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BARLO PC opaque is a brand name for extruded Polycarbonate sheet produced by Quinn Plastics in accordance to: ISO 11963/DIN 16801.

BARLO PC UVP opaque sheets are equipped with UV-Protection for outdoors. BARLO PC opaque offers excellent high impact resistance, good chemical resistance and recyclability. BARLO PC opaque is easy to thermoform, cold/hot bend. Thermoforming conditions and parameters are similar to standard PC sheets. Other assembling techniques like drilling, sawing, cutting, and punching are also similar to standard PC sheets.

Quinn offers three colours of black, white and grey with thickness from 2 to 6 mm. BARLO PC opaque can be produced with various surface textures i.e. Prismatic, Haircell and Impala on request with respective surcharges.

### 2. CHARACTERISTICS

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- Easy to fabricate, cut drill and saw using standard equipment
- Easy to vacuum form (needs pre drying for thermal forming)
- Exceptional low and high temperature performance
- Easy to recycle
- Excellent mechanical, thermal and electrical properties
- High impact resistance and virtually unbreakable
- BARLO PC UVP opaque sheets has uv protected surfaces giving excellent durability to outdoor weathering.
- BARLO PC UVP opaque is produced by co-extrusion and has double sided UV-protection

### 3. APPLICATIONS

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- Packaging
- Partitioning and separation walls
- Containers, bowls, tubs
- Impact resistant covers and protective equipment
- Replacement for wood, metals and fibreglass
- Road and traffic signage
- Office machinery protective aesthetic covers and panels
- Instrument casing
- Automotive components
- Street furniture and signage

### 4. FABRICATION AND FINISHING TECHNIQUES

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BARLO PC opaque and BARLO PC UVP opaque sheets are easy to handle.

Milling drilling, tapping, sawing, shearing and punching, die cutting, routing, forming, cold and hot bending as well as welding do not generate any problems for BARLO PC and BARLO PC UVP opaque sheets.

More detailed information on fabrication and finishing techniques for PC can be found in the "USER GUIDE", available on request.

## 5. TECHNICAL INFORMATION

PROPERTY	METHOD	UNITS	BARLO PC
<b>GENERAL</b>			
<b>OPAQUE</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1,2
<b>MECHANICAL</b>			
Flexural Modulus	ISO 489	MPa	-
Flexural Strength	ISO 178	MPa	-
Tensile Modulus	ISO 527	MPa	2300
Tensile Strength at yield	ISO 527	MPa	60
Elongation	ISO 527	%	60
Erichsen Scratch resistance	DIN 53799	N	0.2
<b>THERMAL</b>			
Vicat Temp. (VST/B 50)	ISO 306	°C	145
Heat Deflection Temp. (A	ISO R 75	°C	135
Specific Heat Capacity	-	J/gK	1.17
Coefficient of linear thermal expansion	DIN 53328	K <sup>-1</sup> x10 <sup>-5</sup>	6.5
Thermal conductivity	DIN 52612	W/mK	0.2
Degradation temperature		°C	> 280
Max. service temperature continuous use		°C	115
Max. service temperature short term use		°C	130
Sheet forming temp. range		°C	180-210
<b>IMPACT STRENGTHS</b>			
Izod (notched)	ISO 180	kJ/m <sup>2</sup>	-
Charpy (notched)	ISO 179	kJ/m <sup>2</sup>	8
Charpy (unnotched)	ISO 179		No Break
<b>ELECTRICAL</b>			
Dielectric constant 50 HZ	DIN 53483		3.0
Volume Resistivity	DIN 53482	Ω.cm	10 <sup>15</sup>
Surface Resistivity	DIN 53482		10 <sup>15</sup>
Dielectric strength	DIN 53481	Ω	> 30
Dissipation Factor (50HZ)	DIN 53483	kV/mm	1x10 <sup>-3</sup>