



# QUINN<sup>™</sup>plastics

PRODUCT INFORMATION

QUINN<sup>™</sup> PC

# QUINN PC

**Security glazing, balcony glazing, machine guards, windows, canopy roofs, ... you name it QUINN PC does it !**

**Indoors or outdoors: QUINN PC is virtually unbreakable and with its excellent optical and weathering properties, it's the material of choice for safety glazing. With its special features and patterns you can use QUINN PC almost anywhere...**

**The sheet has excellent mechanical, thermal and electrical properties. So, if you work in the construction or glazing industries, make your life comfortable and use QUINN PC... success guaranteed!**

## PRODUCT IDENTIFICATION

QUINN PC is the brand name for extruded Polycarbonate sheet from Quinn Plastics in accordance with: ISO 11963/DIN 16801.

The QUINN PC programme offers solutions to both indoor and outdoor applications and for outdoor use we recommend QUINN PC UVP, a material with 10 years warranty.

As a result of the extrusion process, Quinn Plastics can offer, in addition to the clear, opal white and brown versions, a variety of colours and patterns on request.

## CHARACTERISTICS

QUINN PC sheets have excellent optical properties and a brilliant surface. The QUINN PC range contains sheets that are easy to fabricate and show exceptional performance at both low and high temperatures (range from -40°C to +135°C). Important benefits of QUINN PC sheets are their excellent mechanical, thermal and electrical properties. They are virtually unbreakable in normal use.

QUINN PC sheets also combine the following excellent properties:

- Easy to vacuum form, (pre-drying required)
- Exceptional low and high temperature performance
- Easy to recycle
- Very high impact properties, virtually unbreakable
- Normally inflammable - Building Regulations I Class B2 to DIN 4102, Part 1.

For gauges from 1.00 up to 4.00 mm Class B1 applies. QUINN PC UVP sheets are manufactured by coextrusion, which means that the two UV-protection layers are integral with the base sheet. QUINN PC UVP sheets are strongly recommended for external use. Even after long years of weathering exposure, QUINN PC UVP sheets will maintain their clarity.

## APPLICATIONS

### QUINN PC:

- Moulded containers, bowls, tubs
- Machine safety guards, vending machine fascias
- Vehicle and boat construction, aircraft (only for internal use)
- Safety glazing (sports centres, kindergartens, penal establishments and other buildings)
- Street and traffic signs
- Office machinery (covers, sight panels)
- Industrial construction
- Partition walls
- Advertising panels
- Replacement glazing

### QUINN PC UVP:

- Lighting covers
- Balcony glazing
- Glazed walkways
- Sound barrier walls
- Greenhouses
- Conservatories
- Doors and windows
- Canopy roofs
- Barrel vaults

## PRODUCT RANGE

- QUINN PC is available with or without a special UV-resistant finish
- Colours: clear, white, brown and grey
- Special features: Opal, UVP Opal, double- or single-sided scratch resistance.  
Special patterns: Crystal, Prismatic, Impala, Haircell, UV Protection on request.
- Standard thicknesses range from 1 to 15 mm. 0.8 mm is available upon request in the regular and UV-grade.

Please contact your local customer service centre for a complete product overview. For details see back of brochure.

# Technical Info

## GENERAL

Property	Method	Units	QUINN PC + QUINN PC UVP
Density	ISO 1183	g/cm <sup>3</sup>	1.2
Rockwell Hardness	D-78	M-scale	-

## OPTICAL

Property	Method	Units	QUINN PC + QUINN PC UVP
Light Transmission	DIN 5036	%	86
Refractive Index	T3	n <sub>D</sub> <sup>20</sup>	1.585

## MECHANICAL

Property	Method	Units	QUINN PC + QUINN PC UVP
Flexural Modulus	ISO 489	MPa	-
Flexural Strength	ISO 178	MPa	>95
Tensile Modulus	ISO 527	MPa	2200
Tensile Strength	ISO 527	MPa	60
Elongation	ISO 527	%	80

## THERMAL

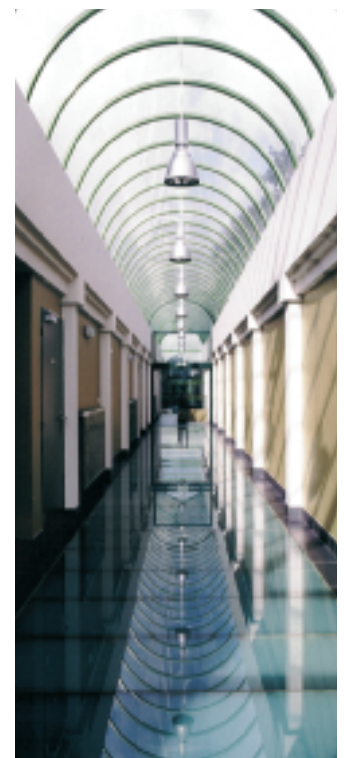
Property	Method	Units	QUINN PC + QUINN PC UVP
Vicat Temp (VST/A 50)	ISO 306	°C	145
Heat Deflection Temp. (A/B)	ISO R75	°C	135
Specific Heat Capacity	-	J/gK	1.17
Coefficient of linear thermal expansion	DIN 53328	K <sup>-1</sup> x10 <sup>-5</sup>	6.5
Thermal Conductivity	DIN 52612	W/mK	0.2
Degradation temperature		°C	>280
Max. service temp. continuous use		°C	115
Max. service temp. short term use		°C	130
Sheet forming temp. range		°C	180-210

## IMPACT STRENGTHS

Property	Method	Units	QUINN PC + QUINN PC UVP
Izod (notched)	ISO 180	KJ/m <sup>2</sup>	-
Charpy (notched)	ISO 179	kJ/m <sup>2</sup>	10
Charpy (unnotched)	ISO 179	kJ/m <sup>2</sup>	NB

## ELECTRICAL

Property	Method	Units	QUINN PC + QUINN PC UVP
Dielectric constant 50 HZ	DIN 53483		3.0
Volume Resistivity	DIN 53482	Ω.cm	10 <sup>15</sup>
Surface Resistivity	DIN 53482	Ω	>10 <sup>15</sup>
Dielectric Strength	DIN 53481	kV/mm	>30
Dissipation Factor (50 HZ)	DIN 53483		8x10 <sup>-4</sup>



For further information:

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Quinn Plastics offers a wide range of plastic sheets that give the widest choice to industry as far as gauge, size, pattern, colour, coating and opacity are concerned.



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