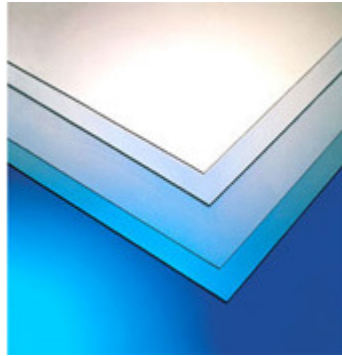


## Material Information Sheet – Polycarbonate



### Description

Polycarbonate is an exceptionally tough plastic material used to make light, rigid products where high levels of performance are desirable. The material is comparatively easy to shape, cut and bond using the correct procedures; post-painting or similar treatments can be carried out where necessary with appropriate preparation.

Its main characteristics are as follows:-

- Exceptional mechanical strength
- Exceptional impact resistance – many times tougher than glass
- Clear/Transparent
- Good fire performance

### Applications in Sign-making

Polycarbonate can be used to produce signage where a mid- to long-term lifespan is desirable.

With appropriate preparation it can be printed using a variety of techniques (such as wide-format digital printing, screen printing etc.).

As polycarbonate is available in clear grades it can be used for transparent signage or to replace glass in applications where its high impact resistance is desirable.

### Limitations

Polycarbonate sheet is subject to crazing and can be damaged by abrasion.

Polycarbonate should be cleaned with care using only the recommended materials and practise. Solvents should never be used to clean Polycarbonate.

## Special Grades

Polycarbonate sheet can be supplied with an additional scratch resistance coating to improve its resistance to abrasion.

## Physical Properties (Typical)

The data below are typical values and are not intended to represent specifications. Their aim is to guide the user towards a material choice. All statements, technical information and recommendation in this product data sheet are presented in good faith, based upon test believed to be reliable and practical experience. However, Bay Plastics Ltd cannot guarantee the accuracy or completeness of this information, and it is the buyer's responsibility to determine the suitability of products in any given application. Therefore no liability whatsoever shall attach to Clarity Sign and Design limited for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of application, processing or use of the aforementioned information or products by the buyer.

Property	Unit	Test Method	Value
Density	g/cm <sup>3</sup>		1.2
Tensile strength at yield	MPa	BS903	>60
Ball indentation hardness	N/mm	53456	>100
Impact Strength	J/m	D 256 (23°C, unnotched, 3.2 mm thick)	No break
Max. service temperature (Short term)	°c		100
(Long term)	°c		~75
Light transmittance	%	D 1003	~90

## Availability

Polycarbonate is commonly supplied in sheet form in thicknesses from 2mm through 12mm.

Polycarbonate is supplied in a small range of colours:-

- Clear
- “ “ with a green tint
- “ “ with a blue tint
- Opalescent (translucent)
- Bronze

## Further information

For further information contact:-

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