PC - Polycarbonate Transparent

Other material names PC: Polycarbonat - PC
Material group: Polycarbonate

Transparent polycarbonate (PC) is a virtually unbreakable material for the toughest environments. Transparent PC has high clarity and good optical performance for applications where good visibility is important. It also has excellent temperature performance which gives good fire properties, the material is even self-extinguishing. Transparent PC is well suited for thermoforming or machining. Our transparent PC is available in different optical qualities, colours, frost, light transmission and with different surface structures. We also have a solar control version that helps to reduce temperature by letting the light pass but keeping the UV-radiation out. Special resins are used when FA (food approval) or FR (flame retardant) characteristics are needed. Most products can be chosen with a protecting UV-layer on top.

Typical applications:

- Soundwall to reduce traffic noise
- Ice hockey rinks
- Machine protection
- Windows
- Roof lights and roofing solutions
- Luminaires
- Pool covers
- Signs
- Ski lift bubbles
- Visors





The material is used in:

Food industry
Electrotechnical industry
Automobile industry

Features:

- Transparent material
- Well suited for thermoforming or machining
- Unbreakable material

Material availability: Material is in stock

Material properties table

Specific weight	1.20 g/cm³
Yield strength	63 N/mm²
Flexural modulus	2 300 N/mm²
Tensile modulus	2 300 N/mm²
Impact toughness	bez zlomu
Antistatic material	No
Specific internal resistance	10^(16) Ω
Specific surface resistance	10^(16) Ω.cm

Thermal expansion	7 10^(-5)/K
Thermal conductivity	0.21 W/(K.m)
Permanent use temperature	-60 ; 115 °C
Transient temperature of use	-50 ; 135 °C
Absorbability	0,15 %
Water absorption	0,35 %
Resistance - oils	podmienečne odolný
Acid resistance	not resistant
Durability - alcali	not resistant
Food contact	No

Engineering plastics are supplied in the form of bars, plates, strips, tubes and sheets. From the semi-finished products the company TechPlasty has regularly in stock, we also supply blanks.

All standard and special materials are designed to meet your specific requirements. Their mechanical, thermal, and electrical properties and chemical resistance satisfy the most demanding requirements and this allows them to work even in the most difficult conditions. If you need advice when choosing the appropriate material for your application, please contact us. We'll gladly advise you. You can utilize the long-term experience of our technical advisors free-of- charge, who can visit you right in your operation and solve your requirements for engineering plastics directly at the site of their usage.

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