

PRODUCT DATA SHEET (REV20250527)

PC / POLYCARBONATE CLEAR TRANSPARENT SHEET

Engineered for clarity, durability, and design flexibility.

SRT Plastics offers a high-performance clear polycarbonate sheet designed for demanding applications requiring impact strength, optical clarity, and thermal resilience.

This virtually unbreakable thermoplastic provides a lightweight yet robust alternative to glass, with excellent formability and fire performance characteristics. Our PC/Polycarbonate – Clear Transparent Sheet is ideal for both protective and visual applications across a wide range of industries.

KEY ADVANTAGES

- Crystal-clear transparency with excellent optical quality
- Lightweight approximately 50% lighter than glass
- Impact resistant over 10x stronger than standard PMMA
- Thermoformable easy to shape and fabricate
- Strong fire behavior performance, compliant with EN 13501-1
- Melts in fire to allow heat and smoke venting, reducing flame spread



TYPICAL APPLICATIONS

- Machine guarding and safety shields
- Interior safety glazing and partitions
- Vandal protection screens
- Indoor signage and display systems
- Riot shields and protective panels
- Medical equipment and helmet visors



AVAILABLE DIMENSIONS

- Standard Sheet Sizes: 2050 x 3050 mm, 2050 x 1250 mm
- Thickness Range: 0.8 mm to 20 mm
- Custom sizes, textures, and thicknesses available upon request





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PROPERTY	VALUE	UNIT	STANDARD
PHYSICAL PROPERTIES			
Density	1,2	g/cm³	ISO 1183
Refractive index (20°C)	1.586	-	ISO 489
Moisture Absorption (24h, 23°C, 50% RH)	0.15	%	ISO 62
MECHANICAL PROPERTIES			
Tensile Strength	60 /70	N/mm²	ISO 527
Elongation	6 / 110	%	ISO 527
Elastic Modulus	>2300	N/mm²	ISO 527
Flexural Modulus	>2300	N/mm²	ISO 178
Impact Strength (charpy unnotched, -40°C)	NB	kJ/m²	ISO 179
Impact Strength (charpy notched, -30°C)	11	kJ/m²	ISO 179
Izod Notched Impact (+23°C / -30°C)	65 / 10	kJ/m²	ISO 180
THERMAL PROPERTIES			
Heat Deflection Temp (HDT A - 1.80 Nmm²)	132	°C	ISO 75
Heat Deflection Temp (HDT B - 0.45 Nmm²)	142	°C	ISO 75
Vicat Softening Temp (VST - B120 / B50)	149 / 148°C	°C I	SO 306
Thermal Conductivity	0.20	W/m-K	ISO 8302
Linear Thermal Expansion (20°C - 70°C)	65×10 ⁻⁶	K- ¹	ISO 11359-2
ELECTRICAL PROPERTIES			
Volume Resistivity (Dry)	>1014	$\Omega.m$	IEC 62631
Surface Resistivity (Dry)	1016	Ω	IEC 62631
Dielectric Strength (Dry)	30	kV/mm	IEC 60243
Dielectric Constant (Dry, 50Hz)	3		IEC 62631
Dielectric Constant (Dry 1MHz)	2.9		IEC 62631
Dissapation Factor (tan δ) (Dry 50Hz)	0.001		IEC 62631
Dissapation Factor (tan δ) (Dry 1MHz)	0.01		IEC 62631