PRODUCT DATA SHEET (REV20251112)

PC / POLYCARBONATE **CLEAR FOOD APPROVED** SHEET

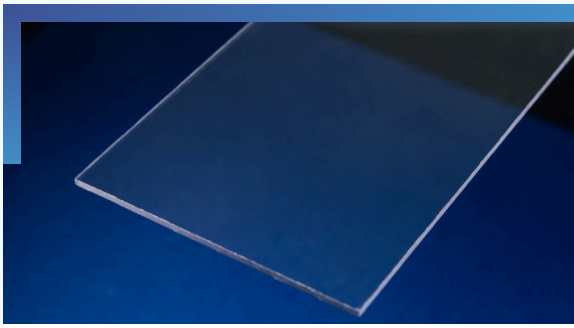
Food-Contact Compliant Polycarbonate with high clarity and surface quality for Hygienic Applications.

SRT Plastics Polycarbonate Clear Food Approved (FA) is a transparent, food-contact-compliant sheet offering outstanding clarity, strength, and thermal resistance. Designed to replace glass in professional environments where visibility, hygiene, and impact performance are critical, this clear polycarbonate solution meets U.S. FDA food-grade requirements and is suitable for limited industrial use within the EU.

Engineered with advanced extrusion technology, it combines optical quality with robust mechanical and thermal stability. The material is easy to saw, form, and fabricate using standard polycarbonate processing methods.

KEY ADVANTAGES

- FDA-approved for food contact (EU use restricted to professional applications)
- Exceptional optical clarity and surface quality
- Extremely high impact resistance—virtually unbreakable
- Half the weight of glass with superior thermal resistance
- Easily thermoformed or fabricated
- Suitable for hygienic environments requiring visibility and safety



TYPICAL APPLICATIONS

- Machine glazing and transparent guards in food and processing areas
- Protective screens, partitions, and display enclosures
- Food packaging and dispensers for professional use
- Inspection windows and covers where visibility and compliance are required
- Transparent barriers in industrial or catering environments

AVAILABLE DIMENSIONS

- Standard Sheet Sizes: 2050 x 3050 mm
- Thickness Ramge: 0.8 - 12 mm
- Colour: Clear
- Special sizes, textures, and thicknesses available on request

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PROPERTY	VALUE	UNIT	STANDARD
PHYSICAL PROPERTIES			
Density	1,2	g/cm³	IS0 1183
Refractive Index (20°C)	1,586		ISO 489
Moisture Absorption 24h 23°C, 50% RH	0,15	%	ISO 62
MECHANICAL PROPERTIES			
Tensile Strength (Yield / Break)	63 / 70	N/mm²	ISO 527
Elongation (Yield / Break)	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 179/1eU
Impact Strength (charpy notched, -30°C)	11	kJ/m²	ISO 179/1eA
Izod Notched Impact (+23°C / -30°C)	60 / 10	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
Co-efficient of Linear Thermal Expansion (20°C - 70°C)	$65x10^{-6}$	K^{-1}	ISO 11359-2
Heat Deflection Temperature HDT A (1,80 N/mm²)	132	°C	ISO 75
Heat Deflection Temperature HDT B (0,45 N/mm²)	142	°C	ISO 75
Vicat Temperature VST/B 120	149	°C	ISO 306
Vicat Temperature VST/B 50	148	°C	ISO 306
Thermal Conductivity	0,20	W/m.K	ISO 8302
ELECTRICAL PROPERTIES			
Volume Resistivity, Dry	$>10^{14}$	Ω.m	IEC 62631
Surface Resistivity, Dry	$>10^{18}$	Ω	IEC 62631
Dielectric Strength, Dry	30	kV/mm	IEC 60243
Dielectric Constant, Dry 50 Hz	3		IEC 62631
Dielectric Constant, Dry 1 MHz	2,9		IEC 62631
Dissapation Factor (tan δ) Dry 50 Hz	0,001		IEC 62631
Dissapation Factor (tan δ) Dry 1 MHz	0,01		IEC 62631