



Polycarbonate UVX

CLEAR, HIGH STRENGTH PROTECTION BARRIER

Insulect PC-UVX is a lightweight, transparent Polycarbonate manufactured with UV protective coatings on both sides. UVX provides excellent weathering properties whilst maintaining high clarity and impact resistance.

Typically used in precision engineering, architectural glazing, process machine guarding, general manufacturing and industrial applications.

Features

- Thermally stable
- High shock and electrical resistance
- Light weight and easy to process
- Excellent clarity - light transmission 82% to 90%
- Flame retardant

Technical Information

Material: Polycarbonate sheet with UV coating
Colour: Clear

Applications

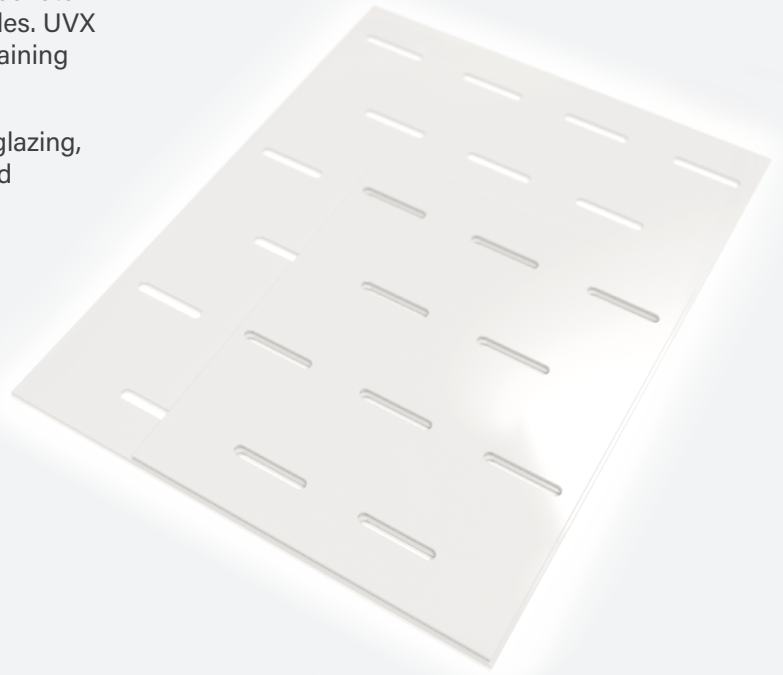
- Switchgear cabinets
- Machine guards and enclosures
- Noise control enclosures

Sizing and Machining

Standard Sheet Size: 1,220mm x 2,440mm | 1,830mm x 2,440mm

Nominal Thickness: 3.0mm, 4.5mm, 6.0mm, 9.5mm

We provide a full machining and fabrication service, delivering everything from cut-to-order sheets to complex fully-finished components. Available for short-run or volume-based orders.



Insulect Australia | Customer Service

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The information in this document is believed to be correct at the time of publication. The user is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. No reliance may be placed on any such information or data without first contacting Insulect Australia to clarify individual user requirements.

Technical Information

Technical Data	Procedure	DIN/*VDE	ASTM *UL	Units	Value
Density		53479	D 792	g/cm ³	1.20
Water absorption	After 24/96 h immersion in water of 23°C	53495	D 570	mg	13 / 23
	At saturation in air 23°C/50% RH	-	-	%	0.15
	At saturation in water of 23°C	-	-	%	0.35
Thermal Properties					
Melting point		-	-	°C	150
Thermal conductivity at 23°C		-	-	°C	-
Coefficient of linear thermal expansion	Average value between 23°C & 60°C	-	-	m/(m.K)	65 x 10 ⁻⁶
	Average value between 23°C & 100°C	-	-	m/(m.K)	65 x 10 ⁻⁶
Deflection temperature under flexural load	Method A: 1.8 N/mm ²	53461	D 648	°C	135
Maximum allowable service temperature in air	For short periods	-	-	°C	135
	Continuously for 5,000/20,000 h	-	-	°C	125 / 115
Minimum service temperature		-	-	°C	-60
Flammability	According to ASTM ("Oxygen Index")	-	D 2863	%	26
	According to UL 94 (3mm thickness)	-	*94	-	V-2
Mechanical Properties at 23°C					
Tensile test	Tensile stress at yield/tensile strength at break	53455	D 638M	N/mm ²	65 / -
	Elongation at break	53455	D 638M	%	> 50
	Modulus of elasticity	53457	D 638M	N/mm ²	2300
Compression test	1%-offset yield strength	53454	D 695	N/mm ²	68
Tensile creep test	Stress to produce 1% elongation in 1,000h	53444	D 2990	N/mm ²	17
Impact strength	- Charpy	53453	-	kJ/m ²	no break
Notched impact strength	- Charpy	53453	-	kJ/m ²	20
	- Izod	-	D256	kJ/m ²	9; 90
Ball indentation hardness H 358/30 or H 961/30 (13)		53456	-	N/mm ²	120
Rockwell hardness		-	D 785	-	M75
Electrical Properties at 23°C					
Dielectric strength		53481	D 149	kV/mm	28
Volume resistivity		53482	D257	Ω.cm	1017
Surface resistivity		53482	D257	Ω	1018
Dielectric constant	- at 50Hz	53483	D 150	-	3
	- 1 Mhz	53483	D 150	-	3
Dissipation factor tan	- at 50Hz	53483	D 150	-	0.001
	- 1 Mhz	53483	D 150	-	0.008
Resistance to tracking		IEC 112	D 150	-	CTI 350



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