

# Product Information/Technical Data Sheet

**Product Name: GLAZEGUARD UV2 (Polycarbonate UV2)**

Trade name:	Glazeguard
Designation:	Polycarbonate UV2
Type of polymer:	Thermoplastic
Food compliance FDA	No
Colour:	Clear

Glazeguard UV sheet is ideal for outdoor applications. It has a polished surface and is UV protected on both sides. Glazeguard UV offers extreme impact strength, exceeding the physical properties of any product in its class. It combines temperature resistance in a wide range (-100°C up to 125°C) with high optical clarity and good fire behavior. It offers the perfect choice for a long service life owing to its good weather resistance.

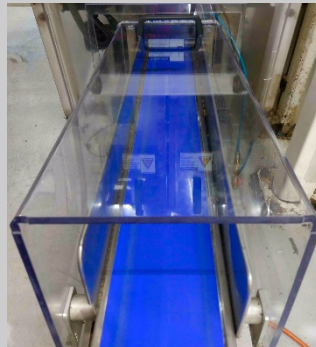
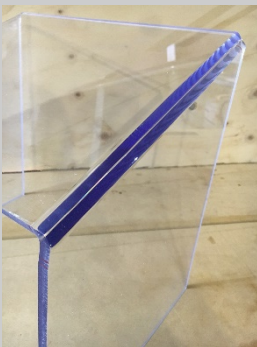
Density:	1.2	ASTM D792
Tensile modulus:	345,000 psi	ASTM D638
Continuous Service Temp:	110 °C	
Maximum Short-Term Temp:	120 °C	

### Applications

<ul style="list-style-type: none"> <li>Industrial/Machine Guards</li> <li>Noise Walls/Sound Barriers</li> <li>Outdoor School and Hospital Shelters</li> <li>Dooms</li> <li>Barrel Vaults</li> </ul>	<ul style="list-style-type: none"> <li>Security Glazing</li> <li>Bus Shelters</li> <li>Roofing, covered walkways, skylights</li> <li>Signage</li> </ul>
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### Key Features and Benefits

<ul style="list-style-type: none"> <li>High impact Strength</li> <li>UV Resistance</li> <li>Light Weight, thermoformable</li> <li>Frame resistance (some grades)</li> </ul>	<ul style="list-style-type: none"> <li>Inherent "Water-Clear" transparency</li> <li>Dimensional stability at elevated temp.</li> <li>Easily cold formed</li> <li>Long life outdoors</li> </ul>
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Sheets – Thickness	3mm – 9.5mm
Sheets – Size	2440mm x 1220mm (non-stock sizes are available on request)

### Physical Properties

	Value	Unit	Verification
Specific Gravity	1.20	-	ASTM D792
Sound Transmission, STC Rating (36"x84")			ASTM E9070
@ 0.118"	25		
@ 0.177"	29		

@ 0.236"	31		
Rockwell Hardness	M70, R118	-	ASTM D785
Chemical Resistance	Passes	-	ANZI Z26.1
<b>Mechanical Properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Verification</b>
Tensile Strength @ Yield	9,300	psi	ASTM D638
Tensile Modulus	345,000	psi	ASTM D638
Flexural Strength	14,500	psi	ASTM D790
Flexural Modulus	36,000	psi	ASTM D790
Flexural Endurance @ 1,800 Cycles/Min, 73°F, 50% RH	1,000	psi	ASTM D671
Compressive Strength @ Yield	10,400	psi	ASTM D695
Elongation	85	%	ASTM D638
Izod Impact Strength, up to 125 mils, Notched Drop	12-18	ft-lbs-in	ASTM D256A
Dart Impact Strength, 1" dia. Dart @ 73°F @ 0°F	>200	ft-lbs	SABIC Textf
	>200		
<b>Thermal Properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Verification</b>
Coefficient of Thermal Expansion	$3.75 \times 10^{-5}$	in/in/°F	ASTM D696
Thermal Shrinkage	1	%	SABIC Testf
Heat Deflection Temperature @ 264 psi @ 66 psi	270	°F	ASTM D648
Continuous Service Temperature	110	°C	-
Maximum Short Term Temperature	120	°C	-
Degradation Temperature	>280	°C	-
Shading Coefficient Clear	280	-	ASHRAE
Grey/Bronze	1.02		
	.79	°F	ASTM D746
<b>Optical</b>			
	<b>Value</b>	<b>Unit</b>	<b>Verification</b>
Light Transmission (Average)	88	%	ASTM D1003
<b>Flammability</b>			
	<b>Value</b>	<b>Unit</b>	<b>Verification</b>
Horizontal Burn (Flame Spread) AEB	<1	in	ASTM D635
Ignition Temperature Flash	873	°F	ASTM D1929
Self	1,076		
£ Measured by dropping a 5-pound dart (1" dia. tip) from a height of 40 feet. These are typical properties and are not intended for specification purposes.			
Version Date: 01-06-2022			

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