



**The Plastic Films Specialist**

# PolyGreen™ GS11-UV(X) Polycarbonate Technical Data Sheet

## Description and Applications

PolyGreen™ GS11-UV(X) Series are advanced UV protected polycarbonate sheets designed for demanding outdoor applications. GS11-UV1 features a durable co-extruded UV protection layer for economical glazing and signage, while GS11-UV2 offers dual sides UV resistance for maximum weatherability. These sheets maintain optical transparency, surface gloss and mechanical strength during prolonged exposure to direct sun.

PolyGreen™ GS11-UV(X) Series is backed by a minimum 7 years outdoor performance warranty, ensuring long term resistance to yellowing and loss of light transmission under typical environmental conditions.

## Typical Property Values

Property	Test Method	Units	Value
<b>Physical</b>			
Density	ASTM D792	g/cm <sup>3</sup>	1.2
Water Absorption, 24 hrs	ASTM D570	%	0.17
Flammability	UL94		V2
UV Resistance	-	Nm	≥ 380
<b>Optical</b>			
Light Transmission	ASTM D1003	%	88 - 92
Refraction Rate	JIS-D7105	%	1.59
<b>Mechanical</b>			
Tensile Strength at Break	ASTM D638	MPa	2340
Tensile Strain at Break	ASTM D638	%	110
Tensile Impact Strength	ASTM D1882	KJ/m <sup>2</sup>	192
Flexural Strength	ASTM D790	MPa	106
Flexural Modulus	ASTM D790	MPa	2470
Charpy notched Impact Strength	ASTM D6110	KJ/m <sup>2</sup>	8.5 – 12.6
Izod notched Impact Strength	ASTM D256	J/m	880
Rockwell Hardness	ASTM D785	Scale R/M	124
<b>Thermal</b>			
Coefficient of Linear Expansion	ASTM E831	1/°C	7.2 x 10 <sup>17</sup>
Specific Heat Capacity	ASTM E1269	J/g•°C	1.17
Thermal Conductivity	ASTM E1530	W/(m•k)	0.235
Thermal Shrinkage	ASTM D1204	%	1.8 – 2.2
Vicat Softening Temperature	ASTM D1525	°C	146
Heat Deflection Temperature	ASTM D648	°C	134

## Tenopex Plastics Co., Ltd

Unit 101, Building 2, No. 136, Hua Xia Road Qiaotou Town,  
Dongguan City, Guang Dong Province, China 523532  
(86) 138 25753516    marketing@tenopexplastics-cn.cn

[www.tenopexplastics.com](http://www.tenopexplastics.com)

## Global Sales Office

(852) 6888 0563    [helen.koh@optimaplusgroup.com](mailto:helen.koh@optimaplusgroup.com)  
(65) 87267516    [helen.koh@optimaplusgroup.com](mailto:helen.koh@optimaplusgroup.com)

These are typical properties and are not intended for specifications purposes. If minimum certifiable properties are required, please contact your local sales representative. Reported values are based on 2.0mm thickness film unless otherwise noted.

Each user is responsible for making its own determination as to the suitability of Tenopex's products, services and recommendations for the user's particular use through appropriate end-use testing and analysis. Although any information or technical recommendation will be given without warranty nor guarantee nor implied, that the results indicated herein are obtained under end-use conditions. Except as provided in seller's standard conditions of sale, seller shall not be responsible for any loss resulting from any uses of its products or services described herein.