

Glass designation :

**GX 15**

Code

**82515**

Color :

**Gray**

Filter category :

**Dark**

Application :

**100 % UV absorbing glass suited for general or special purpose sunglass lenses. Pass cited standards for traffic signal recognition at 1.8 mm thickness**

**PHYSICAL PROPERTIES**

Density :	2.56	g/cm <sup>3</sup>
Linear Exp. Coef. :	91	10 <sup>-7</sup> / °C
Viscosity : Soft. Pt	705	°C
Ann. Pt	540	°C
Strain Pt	500	°C

**REFRACTIVE INDEX**

Line		λ (nm)	Value
F'	Cadmium	480.0	
F	Hydrogen	486.1	
e	Mercury	546.1	
d	Helium	587.6	1.52500
C'	Cadmium	643.8	
C	Hydrogen	656.3	
Abbe Number		ve	
		vd	

**TRANSMISSION PROPERTIES (1,8 mm)**

<b>VISIBLE</b>	<b>380 - 780 nm</b>
Luminous transmission factor	14%
Transmission category	
ISO 8980-3	3

<b>ULTRAVIOLET</b>	
UV - B tλ(max) 280 - 315 nm	< 0.1 %
t(avg) 280 - 315 nm	< 0.1 %
Solar UV-B transmission factor	< 0.1 %

<b>ULTRAVIOLET</b>	
UV - A tλ(max) 315 - 350 nm	< 0.1 %
t(moy) 315 - 380 nm	< 0.5 %
Solar UV-A transmission factor	< 0.5 %

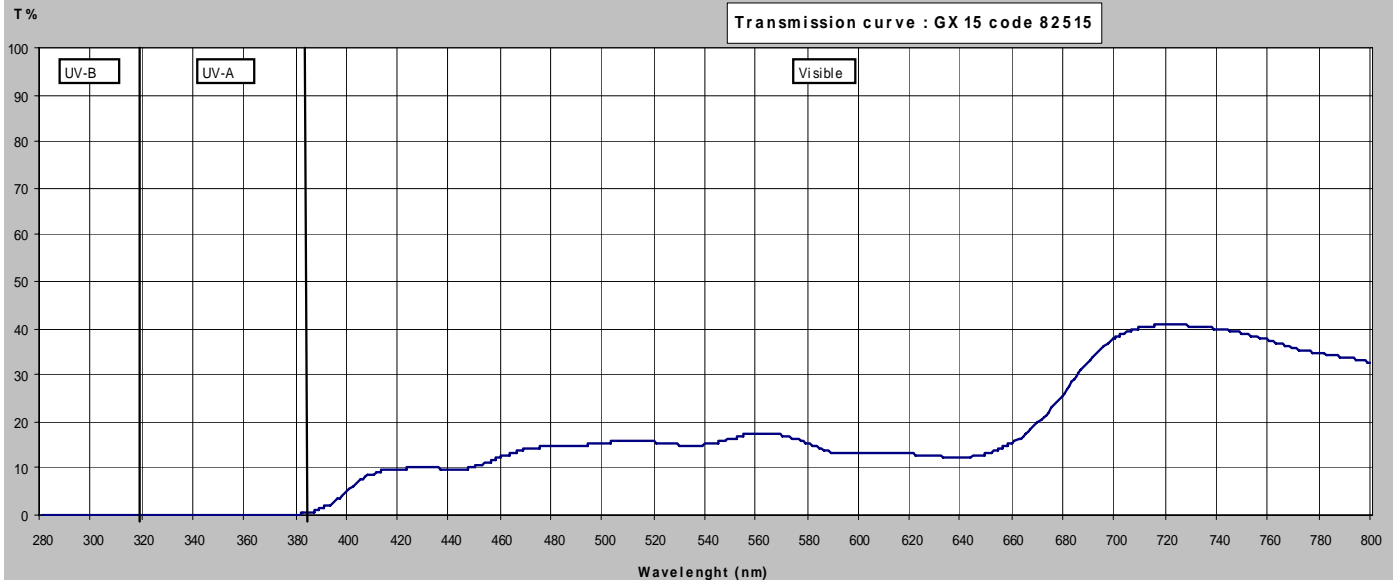
<b>BLUE LIGHT</b>	<b>380 - 500 nm</b>
Blue light transmission factor	11%

<b>TRAFFIC SIGNAL RECOGNITION</b>	
ISO 14889	Pass
ANSI Z80-3	Pass
AS 1067.1	Pass

**COATING & TEMPERING**

(See also notes below)

Vacuum coating	YES
Chemical tempering	YES
Air tempering	Not recommended



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<b>Chemtempering :</b>	Recommended bath and cycle (no preheating nor postcooling) :		
<b>Bath :</b>	Potassium Nitrate	<b>99.5 %</b> (Sodium nitrate 0,5% max)	Time : <b>16 Hr</b>
	Silicic Acid	<b>0.5 %</b>	$\theta$ °C : <b>450 °C</b>

**Air tempering :**  
Not recommended. Minimum lens thickness for air tempered lenses is 2 mm.

**Coatings :**  
Vacuum coatings for antireflexion or mirror are possible.

**Compatible Bariums :**  
This glass can not be used to manufacture fused multifocal lenses.  
There is no compatible bariums to be fused with this glass

**Properties according to ISO 14889**

**ISO 14889 Chapter 4.3.1** *Physiological compatibility*

The above glass products are not known to be physiologically incompatible, nor known to create a significant number of allergic reactions, when the lenses made out of these materials are used as intended by the manufacturer

**ISO 14889 Chapter 4.3.2** *Flammability*

The above glass products are not flammable, and when tested as described in chapter 5.1 of ISO 14889, there is no continued combustion after withdrawal of the test rod.