

Glass designation :

**UV DG 37**

Code

**80188**

Color :

**Gray-Blue**

Filter category :

**Medium**

Application :

**100 % UV absorbing glass suited for general or special purpose sunglass lenses. Gray blue color with excellent color rendition. Pass all national and international standards for traffic signal recognition.**

**PHYSICAL PROPERTIES**

|                     |           |                       |
|---------------------|-----------|-----------------------|
| Density :           | 2.48      | g/cm <sup>3</sup>     |
| Linear Exp. Coef. : | 68.1      | 10 <sup>-7</sup> / °C |
| Viscosity :         | Soft. Pt  | 649 °C                |
|                     | Ann. Pt   | 493 °C                |
|                     | Strain Pt | 456 °C                |

**REFRACTIVE INDEX**

| Line        |          | λ (nm) | Value   |
|-------------|----------|--------|---------|
| F'          | Cadmium  | 480.0  | 1.52974 |
| F           | Hydrogen | 486.1  | 1.52923 |
| e           | Mercury  | 546.1  | 1.52533 |
| d           | Helium   | 587.6  | 1.52320 |
| C'          | Cadmium  | 643.8  | 1.52108 |
| C           | Hydrogen | 656.3  | 1.52068 |
| Abbe Number | ve       |        | 60.7    |
|             | vd       |        | 61.2    |

**TRANSMISSION PROPERTIES (2 mm)**

|                              |                     |
|------------------------------|---------------------|
| <b>VISIBLE</b>               | <b>380 - 780 nm</b> |
| Luminous transmission factor | 37.0%               |
| Transmission category        |                     |
| ISO 8980-3                   | 2                   |

|                                |         |
|--------------------------------|---------|
| <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 % |

|                                |         |
|--------------------------------|---------|
| UV - A tλ(max) 315 - 350 nm    | < 0.1 % |
| t(moy) 315 - 380 nm            | < 0.1 % |
| Solar UV-A transmission factor | < 0.1 % |

|                                |     |
|--------------------------------|-----|
| <b>BLUE LIGHT 380 - 500 nm</b> |     |
| Blue light transmission factor | 43% |

**TRAFFIC SIGNAL RECOGNITION**

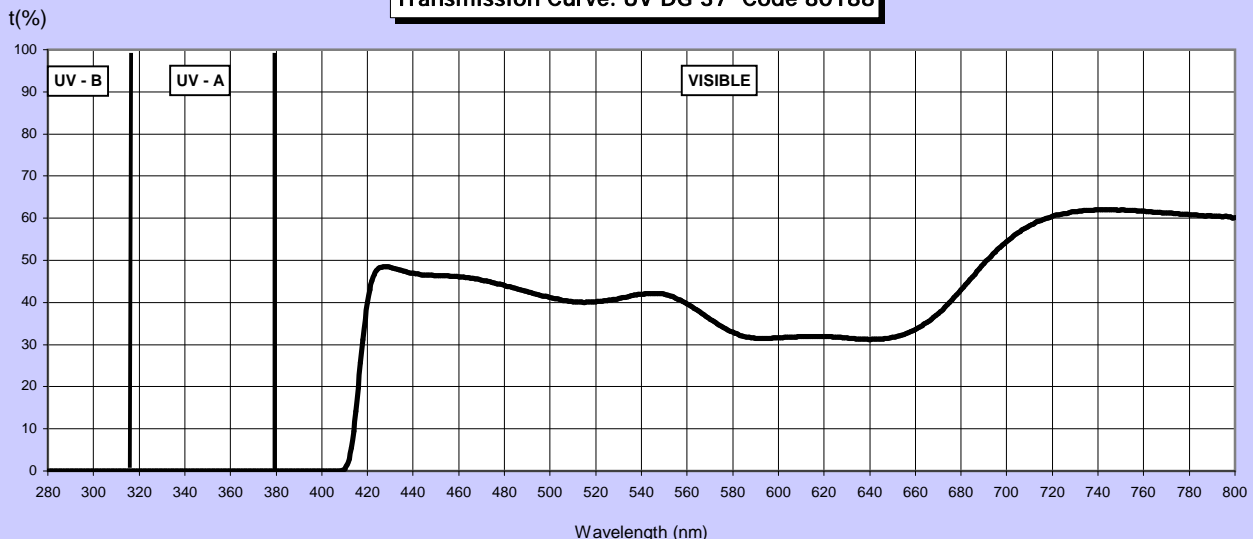
|            |      |
|------------|------|
| ISO 14889  | Pass |
| ANSI Z80-3 | Pass |
| AS 1067.1  | Pass |

**COATING & TEMPERING**

(See also notes below)

|                    |     |
|--------------------|-----|
| Vacuum coating     | YES |
| Chemical tempering | YES |
| Air tempering      | NO  |

Transmission Curve: UV DG 37 Code 80188



|                     |  |      |              |
|---------------------|--|------|--------------|
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| Color :             | <b>Gray-Blue</b>   |      |              |
| Filter category :   | <b>Medium</b>  |      |              |
| Application :       | <b>100 % UV absorbing glass suited for general or special purpose sunglass lenses. Gray blue color with excellent color rendition. Pass all national and international standards for traffic signal recognition.</b> |      |              |

|                        |  |               |                           |
|------------------------|--|---------------|---------------------------|
| <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) |
|                        | Silicic Acid   | <b>0.5 %</b>  |                           |
|                        |  | Time :        | <b>16 Hr</b>              |
|                        |  | $\theta$ °C : | <b>450 °C</b>             |

**Air tempering :**  
Do not air temper this glass.

**Coatings :**  
Vacuum coatings for coloring, antireflexion or mirror are possible.  
Special attention is required to achieve an appropriate surface quality, including in the selection of the cleaning products used after surfacing and before coating. The use of strong acidic solution should be avoided.

**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.