

Glass designation :	FUSIBLE PHOTOGRAY THIN&DARK™	Code	8158
Color :	Clear to dark gray.		
Glass type :	Wide range photochromic glass for thin lenses application (2mm)		
Application :	Ophthalmic lenses : Fused multifocal, or Progressive addition. (heat forming)		

<u>PHYSICAL PROPERTIES</u>		
Density :	2.38	g/cm ³
Linear Exp. Coef. :	62.2	10 ⁻⁷ /°C
Viscosity :	Soft. Pt	634 °C
	Ann. Pt	493 °C
	Strain Pt	463 °C
<u>REFRACTIVE INDEX</u>		
Line	λ (nm)	Value
F'	Cadmium	480.0 1.52989
F	Hydrogen	486.1 1.52938
e	Mercury	546.1 1.52518
d	Helium	587.6 1.52300
C'	Cadmium	643.8 1.52063
C	Hydrogen	656.3 1.52021
Abbe Number	ve	56.7
	vd	57.0

<u>TRANSMISSION PROPERTIES</u>
As delivered, this glass is not photochromic. Photochromic properties are developed during the heat cycle used for fusing or forming.
Corning S.A.S. Optical customer engineering will provide full assistance to achieve consistent transmission properties, equivalent to those of 8157 glass code.
Order acceptance is submitted to technical agreement with Corning S.A.S. Optical customer engineering representative.
For more information on transmission or other material properties, refer to code 8157 product data sheet.

<u>COATING & TEMPERING</u>		
(See also notes below)	Vacuum coating	YES
	Chemical tempering	YES
	Air tempering	NO

<u>CHEMICAL DURABILITY (class)</u>	To water	NF ISO 719	HGB3
	To acid	DIN 12-116	3
	To alkalis	ISO 695	A2

Compatible Bariums :
 This glass as been specifically designed for fused multifocal lenses production. Special care is exercised for excellent match between the carrier blank, the upper and the lower segments, with close tolerances for refractive index and adjusted seal stress.

The addition segment glasses, compatible with this glass, are shown below :

Refractive index (nd)	1.588	1.617	1.653	1.701	1.750
Glass code Nr	8082	8083	8087	8088	8218

<u>Properties according to ISO 14889</u>	
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.	