

Glass designation :

UNICROWN

Code

8214

Color :

White

Glass type :

Chemtemperable, UV absorbing crown glass

Application :

Ophthalmic lenses : Single vision, progressive addition.

PHYSICAL PROPERTIES

Density :	2.61	g/cm ³
Linear Exp. Coef. :	93	10 ⁻⁷ / °C
Viscosity :	Soft. Pt	710 °C
	Ann. Pt	520 °C
	Strain Pt	475 °C

REFRACTIVE INDEX

Line		λ (nm)	Value
F'	Cadmium	480.0	1.52969
F	Hydrogen	486.1	1.52918
e	Mercury	546.1	1.52512
d	Helium	587.6	1.52300
C'	Cadmium	643.8	1.52073
C	Hydrogen	656.3	1.52030
Abbe Number	ve		58.5
	vd		58.8

TRANSMISSION PROPERTIES (2 mm)

VISIBLE		380 - 780 nm
Luminous transmission factor		91.5%
Transmission category		
ISO 8980-3		0
ULTRAVIOLET		
t(avg) 280 - 315 nm		< 0.1 %
Solar UV-B transmission factor		< 0.1 %
t(moy) 315 - 380 nm		47.0%
Solar UV-A transmission factor		35.0%
BLUE LIGHT 380 - 500 nm		
Blue light transmission factor		91.5%
TRAFFIC SIGNAL RECOGNITION		
ISO 14889		Pass
ANSI Z80-3		Pass
AS 1067.1		Pass

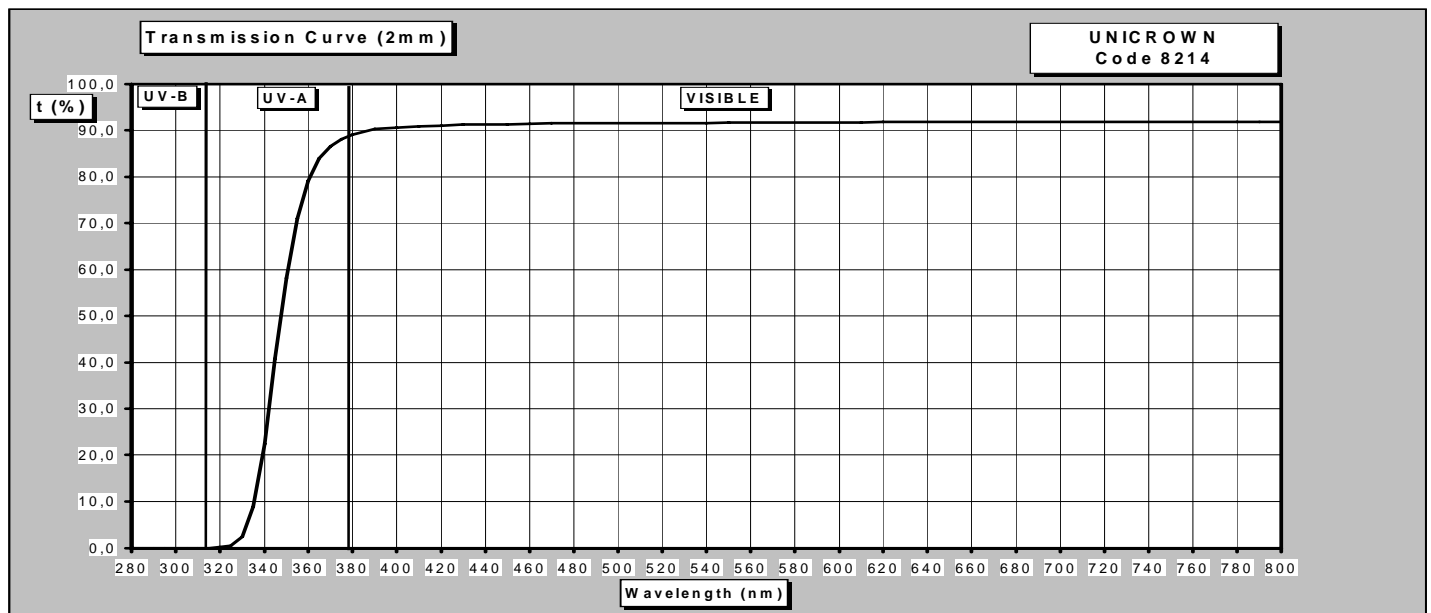
COATING & TEMPERING

(See also notes below)

Vacuum coating	YES
Chemical tempering	YES
Air tempering	YES

CHEMICAL DURABILITY (class)

To water	NF ISO 719	HGB3
To acid	DIN 12-116	1
To alkalis	ISO 695	A2



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Chemtempering :

Recommended bath and cycle (no preheating nor postcooling) :

Bath :	Potassium Nitrate	99.5 %	(Sodium nitrate 0,5% max)	Time :	16 Hr
	Silicic Acid	0.5 %		θ °C :	450 °C

Air tempering :

Air tempering using conventional processes for standard crown glasses.

Compatible Bariums :

This glass shall not be used to manufacture fused multifocal lenses. For that purpose, select

Glass Code **8210 UNICROWN LJ FUS**

Mold application :

A specific version of this glass is available under **Glass Code 8214 M**

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.