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REVO-01 The ultimate Led lenses material.



REVO-01 is a polyurethane material, for optical applications, used exclusively by IODA for the construction of lenses at d lighting industrial use.

Developed in collaboration with Acomon AG (Japanese multinational) the composition of the REVO-01 has been

modified in order to create lenses that not only boast advanced optical properties but also lightweight, with excellent mechanical properties and high stability over time (not sensitive to light UV).

REVO-01 is characterized by:- Excellent high optical transparency characteristics; high Abbe number and high refractive index.

- Excellent mechanical characteristics, excellent impact resistance, mechanical workability, toughness and high resistance to chemicals (resistance to solvents such as acetone, benzene, and ethanol).

- Excellent resistance to high temperatures, while the PMMA or polycarbonate lenses is advisable not to exceed 75/80 ° c for the year, with lenses REVO-01 you can go up to 120 ° C without problems.

IODA is engaged in the design and manufacture of lenses,

REVO-01 is crucial for the creation of innovative products and high technological content.

Properties of REVO-01material:

	REVO-01	Method
Optical Properties		
Refractive Index	1,507	ASTM D 542
Abbe Nr.	54	ASTM D 542
Yellowness Index	0,5	ASTM D 1925
Light Trasmission, %	92.5	ASTM D 1003
Haze, %	0,1	ASTM D 1003
Chemical properties		
Heavy metals content	None	Internal
Ethanol (Alcol)	No defects	Internal
H2SO4 (sulfuric acid)	No defects	Internal
10%NaOH (Sodium hydroxide)	No defects	Internal
Acetone	No defects	Internal



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Temperature v	working	range
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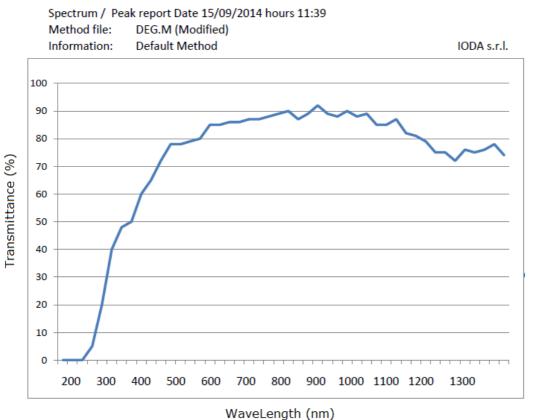
No defects	Internal	
No defects	Internal	
1,116	ASTM D 792	
107	ASTM D 785	
150	ASTM D 256	
120	ASTM D 648	
14	Steel wool	
4,5	Internal	
33	Internal	
Excellent	Internal	
Excellent	Internal	
Excellent	Internal	
	No defects 1,116 107 150 120 14 4,5 33 Excellent Excellent	

Outdoor durability and thermal ageing.

Yellowness Index ASTM 1925

Plano lenses	Unaged= 0,5	Aged 24h at 110°c	Aged 2 years outdoor
REVO-01	0,5	0,7	0,9

Trasmittance diagram :



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