Specification Physical and chemical properties	**DOCTAN®**

Soda-lime glass used for moulded lenses

Colour: colourless

Use: Glass to be used for moulding of headlight lenses

Values without tolerance indications are guiding values

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Specification Physical and chemical properties	**DOCTAN®**
1. Optical properties	
1.1 Refractive index (20 °C)	n_e 1,526 n_d 1,5230 ± 0,003
1.1.1 Abbe value	v_e 56,5 v_d 56,9
1.2 Degree of transmittance	
1.2.1 τ (λ) – curve Diagram of spectral degree of transmittance τ (λ) for d = 20 mm (λ = 300 nm – 2500 nm)	see annex
1.2.2 Degree of light transmittance τ_v	τ_{vA} 91,7 τ_{vD65} 91,6

Specification Physical and chemical properties		**DOCTAN®**
2. Thermal properties		
2.1 Viscosity and corresponding temperatures		
Description	Viscosity log η in dPas	Temperature ϑ in °C
Strain point	14,5	486
Annealing point	13,0	537
Softening point	7,6	723
Forming temperature	6,0	790
Forming temperature	5,0	884
Forming temperature	4,0	1045
2.2 Transformation temperature T_g in °C		538
2.3 Coefficient of thermal expansion α		
2.3.1 Coefficient of mean linear thermal expansion $\alpha_{(20°C - 300°C)}$ in 10^{-6} K^{-1} (static measurement)		9,3

Specification Physical and chemical properties		**DOCTAN®**
3.	**Mechanical properties**	
3.1	**Density ρ in g/cm³**	2,52
4.	**Chemical properties**	
4.1	**Hydrolytic-resistance according to DIN ISO 719**	
	Hydrolytic class	HGB 3
	Base-equivalent as Na2O per gram of glass grains in µg/g	156
4.2	**Acid-resistance according to DIN 12 116**	
	Acid class	S 1
	Half reduction of surface weight after 6 hrs. in mg/dm²	0,4
4.3	**Base-resistance according to DIN ISO 695**	
	Base class	A 2
	Reduction of surface weight after 3 hrs. in mg/dm²	79

Annex

Spectral transmittance