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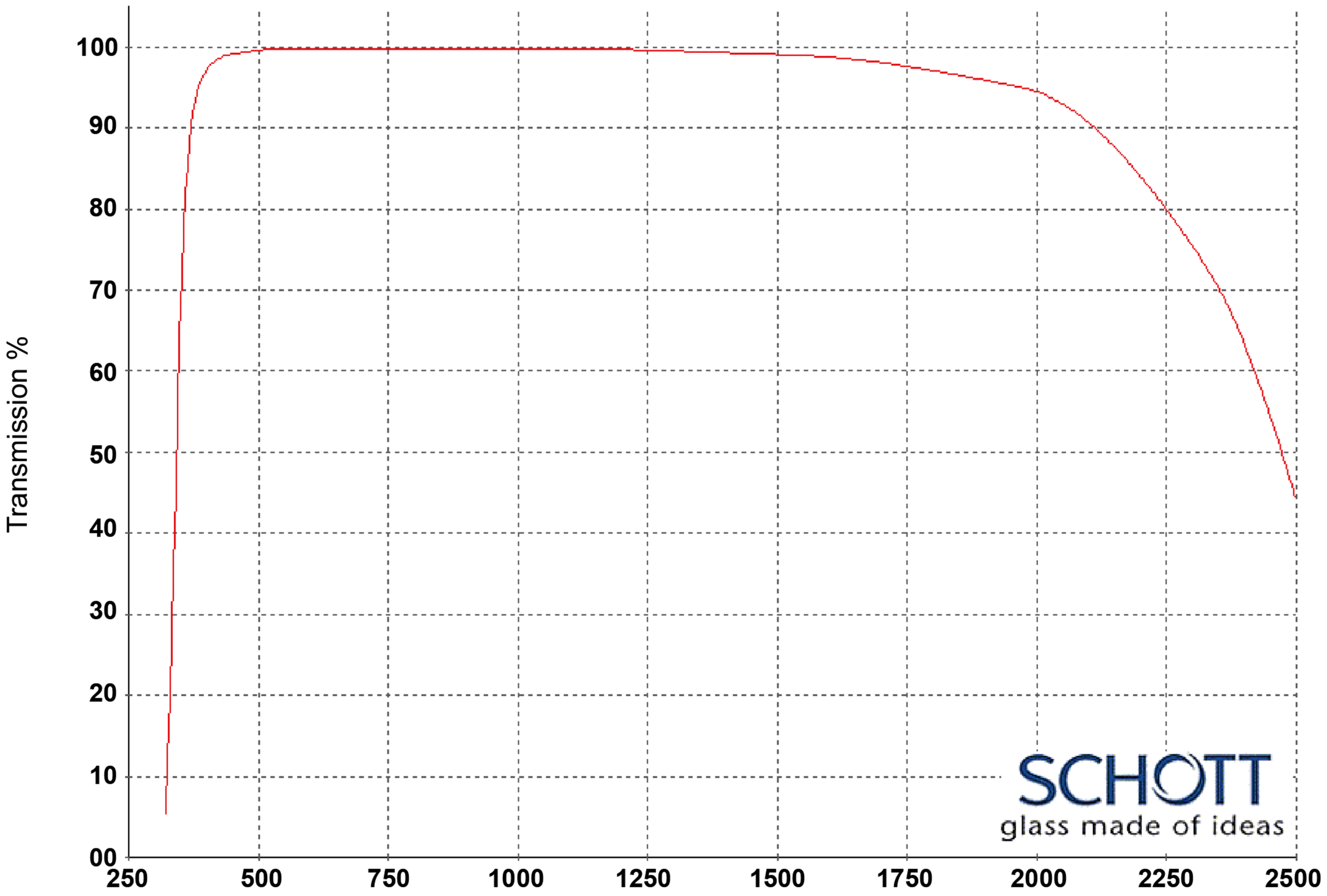
Title: Optical Glasses - 250-2500nm
Material: N-LAF34 for 250nm - 2500 transmission
Range: N-LAF34



Wavelength in nm

Internal transmittance for 10mm thickness

WAVELENGTH	N-LAF34 (T%)
2500 nm	0.440
2325 nm	0.730
1970 nm	0.950
1530 nm	0.990
1060 nm	0.998
700 nm	0.998
660 nm	0.998
620 nm	0.998
580 nm	0.998
546 nm	0.998
500 nm	0.996
460 nm	0.992
436 nm	0.989
420 nm	0.984
405 nm	0.976
400 nm	0.971
390 nm	0.959
380 nm	0.940
370 nm	0.900
365 nm	0.870
350 nm	0.690
334 nm	0.300
320 nm	0.030
310 nm	0.000
300 nm	0.000
290 nm	0.000
280 nm	0.000
270 nm	0.000
260 nm	0.000
250 nm	0.000

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SCHOTT
glass made of ideas

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.73085
$n_{1970.1}$	1970.1	1.73824
$n_{1529.6}$	1529.6	1.74610
$n_{1060.0}$	1060.0	1.75447
n_t	1014.0	1.75546
n_s	852.1	1.75962
n_r	706.5	1.76515
n_C	656.3	1.76780
$n_{C'}$	643.8	1.76855
$n_{632.8}$	632.8	1.76924
n_D	589.3	1.77236
n_d	587.6	1.77250
n_e	546.1	1.77621
n_F	486.1	1.78337
$n_{F'}$	480.0	1.78427
n_g	435.8	1.79196
n_h	404.7	1.79915
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula	
B_1	$1.75836958 \cdot 10^{+00}$
B_2	$3.13537785 \cdot 10^{-01}$
B_3	$1.18925231 \cdot 10^{+00}$
C_1	$8.72810026 \cdot 10^{-03}$
C_2	$2.93020832 \cdot 10^{-02}$
C_3	$8.51780644 \cdot 10^{+01}$

Constants of Formula dn/dT	
D_0	$3.89 \cdot 10^{-06}$
D_1	$1.02 \cdot 10^{-08}$
D_2	$-1.91 \cdot 10^{-11}$
E_0	$5.88 \cdot 10^{-07}$
E_1	$7.57 \cdot 10^{-10}$
λ_{TK}[µm]	0.181

Internal Transmittance τ_i		
λ [nm]	τ_i [10 mm]	τ_i [25 mm]
2500	0.44	0.13
2325	0.73	0.46
1970	0.950	0.87
1530	0.990	0.975
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.996	0.991
460	0.992	0.981
436	0.989	0.972
420	0.984	0.961
405	0.976	0.940
400	0.971	0.930
390	0.959	0.900
380	0.940	0.85
370	0.900	0.76
365	0.87	0.70
350	0.69	0.40
334	0.30	0.05
320	0.03	
310		
300		
290		
280		
270		
260		
250		

Color Code	
λ_{80}/λ_5	38/32

Remarks

Relative Partial Dispersion	
$P_{s.t}$	0.2674
$P_{C.s}$	0.5256
$P_{d.C}$	0.3018
$P_{e.d}$	0.2382
$P_{g.F}$	0.5518
$P_{i.h}$	
$P'_{s.t}$	0.2648
$P'_{C'.s}$	0.5679
$P'_{d.C'}$	0.2515
$P'_{e.d}$	0.2359
$P'_{g.F'}$	0.4895
$P'_{i.h}$	

Deviation of Rel. Partial Dispersion ΔP from "Normal Line"	
$\Delta P_{C.t}$	0.0126
$\Delta P_{C.s}$	0.0070
$\Delta P_{F.e}$	-0.0023
$\Delta P_{g.F}$	-0.0085
$\Delta P_{i.g}$	

Other Properties	
$\alpha_{-30/+70°C}$[10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$[10^{-6}/K]	7.0
Tg[°C]	668
$T_{10}^{13.0}$[°C]	659
$T_{10}^{7.6}$[°C]	745
c_p[J/(g·K)]	0.800
λ[W/(m·K)]	0.560
ρ[g/cm³]	4.24
E[10^3N/mm²]	123
µ	0.292
K[10^{-6}mm²/N]	1.44
$HK_{0.1/20}$	770
HG	2
B	0
CR	1
FR	1
SR	51.3
AR	1
PR	1

Temperature Coefficients of Refractive Index						
	$\Delta n_{rel}/\Delta T$[10^{-6}/K]			$\Delta n_{abs}/\Delta T$[10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/ -20	4.2	5.2	6.2	1.9	2.8	3.7
+20/+40	4.3	5.4	6.5	2.7	3.9	4.9
+60/+80	4.4	5.6	6.8	3.2	4.4	5.5

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