Data Sheet



N-BAF10

N-BAF10	n _d = 1.67003	$v_d =$	47.11	$n_F - n_C = 0.014222$
670471.375	n _e = 1.67341	$v_e =$	46.83	$n_{F'} - n_{C'} = 0.014380$
Refractive Indices	Internal Transmittan	ce τ _i		Relative Partial Dispersion

 τ_i [10mm]

0.730

0.860

0.967

0.992

0.998

0.998

0.996

0.996

0.996

0.996

0.992

0.987

0.981

0.976

0.959

0.950

0.920

0.850

0.720

0.630

0.180

0.900

0.880

0.800

0.660

0.440

0.310

0.010

 λ [nm] 2500

2325

1970

1530

1060

700

660

620

580

546

500

460

436

420

405

400

390

380

370

365

270 260 250

Refractive Indices				
	λ [nm]			
n _{2325.4}	2325.4	1.63524		
n _{1970.1}	1970.1	1.64094		
n _{1529.6}	1529.6	1.64714		
n _{1060.0}	1060.0	1.65404		
n _t	1014.0	1.65488		
n _s	852.1	1.65849		
n _r	706.5	1.66339		
n _C	656.3	1.66578		
n _{C'}	643.8	1.66645		
n _{632.8}	632.8	1.66708		
n _D	589.3	1.66990		
n _d	587.6	1.67003		
n _e	546.1	1.67341		
n _F	486.1	1.68000		
n _{F'}	480.0	1.68083		
\mathbf{n}_{g}	435.8	1.68801		
n _h	404.7	1.69480		
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	1.58514950	
B ₂	0.143559385	
B ₃	1.085212690	
C ₁	0.00926681282	
C ₂	0.0424489805	
C ₃	105.6135730	

Constants of Formula for dn/dT		
D ₀	3.79E-06	
D ₁	1.28E-08	
\mathbf{D}_2	-1.42E-11	
E ₀	5.84E-07	
E ₁	7.60E-10	
λ _{TK} [μm]	0.220	

λ_{80} / λ_{5}	39/35			
$(*=\lambda_{70}/\lambda_5)$				
Remarks				

Color Code

Temperatu	Temperature Coefficients of the Refractive Index					
	Δn _{rel} /ΔT [10 ⁻⁶ /K]			$\Delta n_{abs}/\Delta T$ [10 ⁻⁶ /K]		
[°C]	1060.0	е	g	1060.0	е	g
-40/-20	3.7	4.7	5.6	1.5	2.4	3.3
+20/+40	3.8	4.9	6.0	2.4	3.5	4.5
+60/+80	4.0	5.2	6.4	2.9	4.1	5.3

ance τ _i		Relative Partial Dispersion		
τ _i [25mm]		$\mathbf{P}_{\mathrm{s,t}}$	0.2539	
0.450		P _{C,s}	0.5122	
0.680		$P_{d,C}$	0.2989	
0.920		$\mathbf{P}_{\mathrm{e,d}}$	0.2377	
0.980		$\mathbf{P}_{g,F}$	0.5629	
0.994		P _{i,h}		
0.994				
0.990		P' _{s,t}	0.2511	
0.991		P' _{C',s}	0.5533	
0.990		P' _{d,C'}	0.2489	
0.990		P' _{e,d}	0.2351	
0.981		P' _{g,F'}	0.4990	
0.967		P' _{i,h}		
0.954	_			
0.940		Deviation of Rela	tive Partial Dispersion	

Deviation of Relative Partial Dispersion			
ΔP from the normal line			
$\Delta P_{C,t}$	-0.0024		
$\Delta P_{C,s}$	-0.0005		
$\Delta P_{F,e}$	-0.0003		
$\Delta P_{g,F}$	-0.0016		
ΔP _{i,g}			

Other Properties	
α _{-30/+70°C} [10 ⁻⁶ /K]	6.2
α _{+20/+300°C} [10 ⁻⁶ /K]	7.0
T _g [°C]	660
T ₁₀ ¹³ [°C]	652
T ₁₀ ^{7.6} [°C]	790
c _p [J/(g*K)]	0.560
λ [W/(m•K)]	0.780
ρ [g/cm ³]	3.75
E [10 ³ N/mm ²]	89
μ	0.271
K [10 ⁻⁶ mm ² /N]	2.37
HK _{0.1/20}	620
HG	4
CR	1
FR	0
SR	4.3
AR	1.3
PR	1