

## N-BALF4 580539.311

$n_d = 1.57956$	$v_d = 53.87$	$n_F - n_C = 0.010759$
$n_e = 1.58212$	$v_e = 53.59$	$n_{F'} - n_{C'} = 0.010863$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.55068
$n_{1970.1}$	1970.1	1.55577
$n_{1529.6}$	1529.6	1.56124
$n_{1060.0}$	1060.0	1.56707
$n_t$	1014.0	1.56776
$n_s$	852.1	1.57065
$n_r$	706.5	1.57447
$n_C$	656.3	1.57631
$n_{C'}$	643.8	1.57683
$n_{632.8}$	632.8	1.57731
$n_D$	589.3	1.57946
$n_d$	587.6	1.57956
$n_e$	546.1	1.58212
$n_F$	486.1	1.58707
$n_{F'}$	480.0	1.58769
$n_g$	435.8	1.59301
$n_h$	404.7	1.59799
$n_i$	365.0	1.60658
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.804	0.580
2325	0.887	0.740
1970	0.967	0.920
1530	0.994	0.984
1060	0.997	0.993
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.995
500	0.997	0.993
460	0.994	0.986
436	0.993	0.983
420	0.992	0.981
405	0.988	0.970
400	0.985	0.964
390	0.976	0.940
380	0.959	0.900
370	0.924	0.820
365	0.891	0.750
350	0.679	0.380
334	0.158	
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2687
$P_{C,s}$	0.5265
$P_{d,C}$	0.3019
$P_{e,d}$	0.2382
$P_{g,F}$	0.5520
$P_{i,h}$	0.7986
$P'_{s,t}$	0.2661
$P'_{C',s}$	0.5689
$P'_{d,C'}$	0.2515
$P'_{e,d}$	0.2359
$P'_{g,F'}$	0.4897
$P'_{i,h}$	0.7909

### Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"

$\Delta P_{C,t}$	-0.0053
$\Delta P_{C,s}$	-0.0019
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0012
$\Delta P_{i,g}$	-0.0114

Constants of Dispersion Formula	
$B_1$	1.31004128
$B_2$	0.142038259
$B_3$	0.964929351
$C_1$	0.0079659645
$C_2$	0.0330672072
$C_3$	109.19732

Constants of Dispersion $dn/dT$	
$D_0$	$5.33 \cdot 10^{-6}$
$D_1$	$1.47 \cdot 10^{-8}$
$D_2$	$-1.58 \cdot 10^{-11}$
$E_0$	$5.75 \cdot 10^{-7}$
$E_1$	$6.58 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.195

Color Code	
$\lambda_{80}/\lambda_5$	37/33
(* = $\lambda_{70}/\lambda_5$ )	

Remarks	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	6.5
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	7.4
$T_g [^\circ C]$	578
$T_{10}^{13.0} [^\circ C]$	584
$T_{10}^{7.6} [^\circ C]$	661
$c_p [J/(g \cdot K)]$	0.690
$\lambda [W/(m \cdot K)]$	0.850
$\rho [g/cm^3]$	3.11
$E [10^3 N/mm^2]$	77
$\mu$	0.245
$K [10^{-6} mm^2/N]$	3.01
$HK_{0.1/20}$	540
<b>HG</b>	2
<b>CR</b>	1
<b>FR</b>	0
<b>SR</b>	1
<b>AR</b>	1
<b>PR</b>	1

Temperature Coefficients of Refractive Index						
[°C]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/ -20	4.1	4.9	5.6	2.0	2.7	3.4
+20/ +40	4.2	5.1	6.0	2.9	3.7	4.6
+60/ +80	4.4	5.4	6.4	3.4	4.3	5.3