

# LBC3N

# 606-637

$n_d = 1.60625$   $\nu_d = 63.71$   $n_F - n_C = 0.009516$   
 $n_e = 1.60852$   $\nu_e = 63.39$   $n_{F'} - n_{C'} = 0.009600$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.59580
$n_s$	852.11	1.59832
$n_{A'}$	768.19	1.60009
$n_r$	706.52	1.60172
$n_c$	656.27	1.60336
$n_{c'}$	643.85	1.60382
$n_{633}$	632.80	1.60425
$n_D$	589.29	1.60617
$n_d$	587.56	1.60625
$n_e$	546.07	1.60852
$n_F$	486.13	1.61288
$n_{F'}$	479.99	1.61342
$n_g$	435.84	1.61806
$n_h$	404.66	1.62235
$n_i$	365.01	1.62960

化学的性質 Chemical Properties	
$D_W$	1
$D_A$	3
$T_{Blue}$	1
$D_{NaOH}$	3
$D_{STPP}$	3
$D_0$	2
$D_H$	

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.996	0.993
1500	0.997	0.995
1400	0.999	0.999
1300	0.999	0.999
1200	0.999	0.999
1100	0.999	0.999
1060	0.999	0.999
1050	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.999
850	0.999	0.999
830	0.999	0.999
800	0.999	0.999
780	0.999	0.999
750	0.999	0.999
700	0.998	0.996
650	0.998	0.996
600	0.999	0.998
550	0.999	0.997
500	0.998	0.995
480	0.996	0.992
460	0.995	0.991
440	0.994	0.988
420	0.994	0.988
400	0.993	0.986
390	0.991	0.982
380	0.985	0.971
370	0.981	0.961
360	0.969	0.939
350	0.941	0.886
340	0.900	0.810
330	0.836	0.698
320	0.742	0.550
310	0.624	0.390
300	0.486	0.236
290	0.337	0.113
280	0.180	0.032

分散式の定数 Constants of dispersion formula	
$A_0$	2.5388484
$A_1$	$-6.6855865 \times 10^{-3}$
$A_2$	$1.5111456 \times 10^{-2}$
$A_3$	$-1.5247241 \times 10^{-4}$
$A_4$	$4.8340116 \times 10^{-5}$
$A_5$	$-2.4061785 \times 10^{-6}$

熱的性質 Thermal Properties	
$T_g$ (°C)	544
$T_s$ (°C)	568
$T_{10^{14.5}}$ (°C)	531
$T_{10^{13}}$ (°C)	540
$T_{10^{7.6}}$ (°C)	601
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	124
$\alpha_{100/300}$ ( $10^{-7}/K$ )	140
$\lambda$ [W/(m·K)]	0.443
$C_p$ [kJ/(kg·K)]	0.464

部分分散 Partial dispersions	
$n_C - n_t$	0.007564
$n_d - n_C$	0.002889
$n_F - n_d$	0.006627
$n_g - n_F$	0.005180
$n_{C'} - n_t$	0.008023
$n_e - n_{C'}$	0.004699
$n_{F'} - n_e$	0.004901
$n_g - n_{F'}$	0.004637

機械的性質 Mechanical Properties	
$H_K$	300 (3)
$F_A$	580
$E$ (GPa)	52
$G$ (GPa)	20.0
$\mu$	0.300
$\sigma_b$ (MPa)	45

部分分散比 Partial dispersion rates			
$P_{C,t}$	0.7949	$P'_{C,t}$	0.8357
$P_{d,C}$	0.3036	$P'_{d,C}$	0.2531
$P_{e,d}$	0.2384	$P'_{e,d}$	0.2364
$P_{F,e}$	0.4580	$P'_{F,e}$	0.5105
$P_{g,F}$	0.5443	$P'_{g,F}$	0.4830
$P_{h,g}$	0.4509	$P'_{h,g}$	0.4470
$P_{i,h}$	0.7620	$P'_{i,h}$	0.7553

屈折率の温度係数 Thermal coefficient of refractive indices ( $\times 10^{-6}/K$ )		
(°C)	$dn/dT$ (rel.)	$dn/dT$ (abs.)
-40/-20	-7.9	-10.1
-20/ 0	-8.1	-9.9
0/+20	-8.2	-9.8
+20/+40	-8.2	-9.6
+40/+60	-8.2	-9.4
+60/+80	-8.1	-9.2

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	0.43

異常分散性 Anomalous dispersions	
$\Delta P_{C,t}$	-0.0487
$\Delta P_{C,A'}$	-0.0105
$\Delta P_{g,d}$	0.0142
$\Delta P_{g,F}$	0.0108
$\Delta P_{i,g}$	0.0355

比重 Specific Gravity	
$d$	3.84

着色度 Coloration Code	
$\lambda 80(\lambda 70)/\lambda 5$	355/285
着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80/\lambda \tau 5$	339/283

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	LBC3N				
Code	606-637				
作成 201104					