

BSC7

517-642

$n_d = 1.51680$ $\nu_d = 64.20$ $n_F - n_C = 0.008050$
 $n_e = 1.51872$ $\nu_e = 64.00$ $n_{F'} - n_{C'} = 0.008105$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.50733
n_s	852.11	1.50980
$n_{A'}$	768.19	1.51143
n_r	706.52	1.51289
n_c	656.27	1.51432
$n_{c'}$	643.85	1.51472
n_{633}	632.80	1.51509
n_D	589.29	1.51673
n_d	587.56	1.51680
n_e	546.07	1.51872
n_F	486.13	1.52237
$n_{F'}$	479.99	1.52282
n_g	435.84	1.52667
n_h	404.66	1.53022
n_i	365.01	1.53622

分散式の定数 Constants of dispersion formula	
A_0	2.2702566
A_1	$-9.1988101 \times 10^{-3}$
A_2	1.1609706×10^{-2}
A_3	$-7.6123911 \times 10^{-5}$
A_4	2.8558727×10^{-5}
A_5	$-1.2566486 \times 10^{-6}$

部分分散 Partial dispersions	
$n_c - n_t$	0.006989
$n_d - n_c$	0.002480
$n_F - n_d$	0.005570
$n_g - n_F$	0.004301
$n_{c'} - n_t$	0.007387
$n_e - n_{c'}$	0.004003
$n_{F'} - n_e$	0.004102
$n_g - n_{F'}$	0.003848

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.8682	$P'_{c,t}$	0.9114
$P_{d,c}$	0.3081	$P'_{d,c}$	0.2569
$P_{e,d}$	0.2386	$P'_{e,d}$	0.2370
$P_{F,e}$	0.4533	$P'_{F,e}$	0.5061
$P_{g,F}$	0.5343	$P'_{g,F}$	0.4748
$P_{h,g}$	0.4407	$P'_{h,g}$	0.4378
$P_{i,h}$	0.7456	$P'_{i,h}$	0.7405

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0224
$\Delta P_{c,A'}$	0.0043
$\Delta P_{g,d}$	0.0008
$\Delta P_{g,F}$	0.0016
$\Delta P_{i,g}$	0.0132

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

熱的性質 Thermal Properties	
T_g (°C)	556
T_s (°C)	621
$T_{10^{14.5}}$ (°C)	529
$T_{10^{13}}$ (°C)	550
$T_{10^{7.6}}$ (°C)	711
$\alpha_{-30/+70}$ ($10^{-7}/K$)	76
$\alpha_{100/300}$ ($10^{-7}/K$)	93
λ [W/(m·K)]	1.210
C_p [kJ/(kg·K)]	0.749

機械的性質 Mechanical Properties	
H_K	595 (6)
F_A	100
E (GPa)	79
G (GPa)	32.7
μ	0.214
σ_b (MPa)	106

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	2.4	0.4
-20/0	2.5	0.8
0/+20	2.6	1.1
+20/+40	2.7	1.4
+40/+60	2.8	1.6
+60/+80	2.8	1.8

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	2.82

比重 Specific Gravity	
d	2.52

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	BSC7	N-BK7	S-BSL7	E-BK7	H-K9L
Code	517-642	517-642	516-641	517-641	517-642
作成 201104					

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.994	0.989
1500	0.996	0.993
1400	0.987	0.974
1300	0.997	0.994
1200	0.998	0.995
1100	0.998	0.995
1060	0.998	0.996
1050	0.998	0.996
1000	0.999	0.997
950	0.999	0.997
900	0.999	0.998
850	0.999	0.998
830	0.999	0.999
800	0.999	0.999
780	0.999	0.999
750	0.999	0.999
700	0.999	0.999
650	0.999	0.999
600	0.999	0.999
550	0.999	0.999
500	0.999	0.998
480	0.999	0.998
460	0.999	0.999
440	0.999	0.998
420	0.999	0.999
400	0.999	0.998
390	0.999	0.997
380	0.997	0.993
370	0.996	0.992
360	0.994	0.989
350	0.985	0.970
340	0.974	0.948
330	0.952	0.906
320	0.905	0.818
310	0.807	0.652
300	0.629	0.396
290	0.389	0.151
280	0.165	0.027

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	325/285
着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	319/283