

E-C3

518-590

$n_d = 1.51823$ $\nu_d = 58.96$ $n_F - n_C = 0.008789$
 $n_e = 1.52033$ $\nu_e = 58.69$ $n_{F'} - n_{C'} = 0.008866$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.50839
n_s	852.11	1.51085
$n_{A'}$	768.19	1.51252
n_r	706.52	1.51404
n_c	656.27	1.51556
$n_{c'}$	643.85	1.51598
n_{633}	632.80	1.51638
n_D	589.29	1.51815
n_d	587.56	1.51823
n_e	546.07	1.52033
n_F	486.13	1.52435
$n_{F'}$	479.99	1.52485
n_g	435.84	1.52913
n_h	404.66	1.53310
n_i	365.01	1.53989

分散式の定数 Constants of dispersion formula	
A_0	2.2725452
A_1	$-8.4104910 \times 10^{-3}$
A_2	1.1306843×10^{-2}
A_3	3.7782297×10^{-4}
A_4	$-2.6903423 \times 10^{-5}$
A_5	1.5976489×10^{-6}

部分分散 Partial dispersions	
$n_c - n_t$	0.007174
$n_d - n_c$	0.002670
$n_F - n_d$	0.006119
$n_g - n_F$	0.004782
$n_{c'} - n_t$	0.007598
$n_e - n_{c'}$	0.004342
$n_{F'} - n_e$	0.004524
$n_g - n_{F'}$	0.004281

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.8162	$P'_{c,t}$	0.8570
$P_{d,c}$	0.3038	$P'_{d,c}$	0.2533
$P_{e,d}$	0.2385	$P'_{e,d}$	0.2364
$P_{F,e}$	0.4577	$P'_{F,e}$	0.5103
$P_{g,F}$	0.5441	$P'_{g,F}$	0.4829
$P_{h,g}$	0.4518	$P'_{h,g}$	0.4479
$P_{i,h}$	0.7726	$P'_{i,h}$	0.7658

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.0051
$\Delta P_{c,A'}$	-0.0022
$\Delta P_{g,d}$	0.0029
$\Delta P_{g,F}$	0.0020
$\Delta P_{i,g}$	0.0049

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

熱的性質 Thermal Properties	
T_g (°C)	501
T_s (°C)	568
$T_{10^{14.5}}$ (°C)	471
$T_{10^{13}}$ (°C)	492
$T_{10^{7.6}}$ (°C)	652
$\alpha_{-30/+70}$ ($10^{-7}/K$)	99
$\alpha_{100/300}$ ($10^{-7}/K$)	122
λ [W/(m·K)]	0.987
C_p [kJ/(kg·K)]	0.756

機械的性質 Mechanical Properties	
H_K	505 (5)
F_A	160
E (GPa)	
G (GPa)	
μ	
σ_b (MPa)	

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	-0.1	-2.2
-20/ 0	0.0	-1.8
0/+20	0.0	-1.5
+20/+40	0.0	-1.4
+40/+60	-0.1	-1.3
+60/+80	-0.3	-1.3

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

比重 Specific Gravity	
d	2.53

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.995	0.991
1500	0.996	0.991
1400	0.998	0.996
1300	0.998	0.996
1200	0.998	0.997
1100	0.998	0.997
1060	0.999	0.998
1050	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
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	0.999	0.997
650	0.998	0.995
600	0.998	0.996
550	0.997	0.994
500	0.997	0.993
480	0.996	0.992
460	0.997	0.993
440	0.997	0.993
420	0.995	0.990
400	0.994	0.989
390	0.995	0.991
380	0.994	0.988
370	0.992	0.984
360	0.995	0.991
350	0.988	0.975
340	0.985	0.969
330	0.966	0.932
320	0.933	0.871
310	0.844	0.712
300	0.650	0.422
290	0.376	0.142
280	0.139	0.019

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	320/285

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	315/284

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	E-C3		S-NSL3	E-K3	H-K10
Code	518-590		518-590	518-589	518-590
作成 201104					