

FCD505

593-686

$n_d = 1.59282$ $\nu_d = 68.63$ $n_F - n_C = 0.008638$
 $n_e = 1.59489$ $\nu_e = 68.25$ $n_{F'} - n_{C'} = 0.008716$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.58333
n_s	852.11	1.58564
$n_{A'}$	768.19	1.58725
n_r	706.52	1.58873
n_c	656.27	1.59021
$n_{c'}$	643.85	1.59062
n_{633}	632.80	1.59101
n_D	589.29	1.59275
n_d	587.56	1.59282
n_e	546.07	1.59489
n_F	486.13	1.59884
$n_{F'}$	479.99	1.59934
n_g	435.84	1.60354
n_h	404.66	1.60743
n_i	365.01	1.61405

化学的性質 Chemical Properties	
D_W	1
D_A	3
T_{Blue}	1
D_{NaOH}	4
D_{STPP}	2
D_0	2
D_H	

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.999	0.998
1500	0.999	0.999
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	0.984
650	0.998	0.991
600	0.998	0.996
550	0.998	0.997
500	0.997	0.995
480	0.997	0.994
460	0.996	0.992
440	0.994	0.989
420	0.994	0.988
400	0.988	0.977
390	0.981	0.962
380	0.964	0.930
370	0.931	0.866
360	0.866	0.750
350	0.749	0.560
340	0.585	0.342
330	0.390	0.152
320	0.213	0.045
310		
300		
290		
280		

分散式の定数 Constants of dispersion formula	
A_0	2.5023550
A_1	$-7.2080042 \times 10^{-3}$
A_2	1.2012743×10^{-2}
A_3	3.4920842×10^{-4}
A_4	$-2.4729676 \times 10^{-5}$
A_5	1.3801567×10^{-6}

熱的性質 Thermal Properties	
T_g (°C)	581
T_s (°C)	611
$T_{10^{14.5}}$ (°C)	556
$T_{10^{13}}$ (°C)	573
$T_{10^{7.6}}$ (°C)	641
$\alpha_{-30/+70}$ ($10^{-7}/K$)	120
$\alpha_{100/300}$ ($10^{-7}/K$)	140
λ [W/(m·K)]	0.629
C_p [kJ/(kg·K)]	0.514

部分分散 Partial dispersions	
$n_c - n_t$	0.006876
$n_d - n_c$	0.002618
$n_F - n_d$	0.006020
$n_g - n_F$	0.004700
$n_{c'} - n_t$	0.007291
$n_e - n_{c'}$	0.004264
$n_{F'} - n_e$	0.004452
$n_g - n_{F'}$	0.004207

機械的性質 Mechanical Properties	
H_K	355 (4)
F_A	460
E (GPa)	75
G (GPa)	29.0
μ	0.298
σ_b (MPa)	51

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7960	$P'_{c,t}$	0.8365
$P_{d,c}$	0.3031	$P'_{d,c}$	0.2528
$P_{e,d}$	0.2386	$P'_{e,d}$	0.2365
$P_{F,e}$	0.4583	$P'_{F,e}$	0.5108
$P_{g,F}$	0.5441	$P'_{g,F}$	0.4827
$P_{h,g}$	0.4503	$P'_{h,g}$	0.4463
$P_{i,h}$	0.7658	$P'_{i,h}$	0.7589

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	-5.9	-8.0
-20/0	-6.1	-8.0
0/+20	-6.3	-7.9
+20/+40	-6.5	-7.9
+40/+60	-6.6	-7.8
+60/+80	-6.7	-7.8

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	0.41

比重 Specific Gravity	
d	4.20

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	375/325
着色度 Coloration of Internal Transmittance (内部透過率)	
$\lambda \tau 80 / \lambda \tau 5$	364/323

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.0705
$\Delta P_{c,A'}$	-0.0175
$\Delta P_{e,d}$	0.0257
$\Delta P_{g,F}$	0.0194
$\Delta P_{i,g}$	0.0822

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
Glass Type	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Code	FCD505		(S-FPM2)	(J-PSKH1)	
	593-686		(595-677)	(593-679)	
作成 201104					