

E-FDS1

923-209

$n_d = 1.92286$ $\nu_d = 20.88$ $n_F - n_C = 0.044198$
 $n_e = 1.93323$ $\nu_e = 20.71$ $n_{F'} - n_{C'} = 0.045071$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.88185
n_s	852.11	1.89064
$n_{A'}$	768.19	1.89724
n_r	706.52	1.90366
n_c	656.27	1.91038
$n_{c'}$	643.85	1.91231
n_{633}	632.80	1.91413
n_D	589.29	1.92248
n_d	587.56	1.92286
n_e	546.07	1.93323
n_F	486.13	1.95457
$n_{F'}$	479.99	1.95738
n_g	435.84	1.98281
n_h	404.66	2.00919
n_i	365.01	

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

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.995	0.993
1500	0.995	0.992
1400	0.997	0.995
1300	0.998	0.998
1200	0.998	0.998
1100	0.998	0.997
1060	0.998	0.999
1050	0.997	0.997
1000	0.997	0.996
950	0.997	0.996
900	0.997	0.996
850	0.997	0.996
830	0.997	0.997
800	0.997	0.996
780	0.997	0.997
750	0.996	0.997
700	0.997	0.997
650	0.997	0.996
600	0.996	0.993
550	0.992	0.983
500	0.980	0.960
480	0.972	0.944
460	0.959	0.919
440	0.932	0.868
420	0.859	0.737
400	0.613	0.376
390	0.350	0.122
380		
370		
360		
350		
340		
330		
320		
310		
300		
290		
280		

分散式の定数 Constants of dispersion formula	
A_0	3.5044639
A_1	$-2.0333833 \times 10^{-2}$
A_2	5.3802700×10^{-2}
A_3	6.2874192×10^{-3}
A_4	$-5.6922176 \times 10^{-4}$
A_5	7.3559387×10^{-5}

熱的性質 Thermal Properties	
T_g (°C)	666
T_s (°C)	716
$T_{10^{14.5}}$ (°C)	638
$T_{10^{13}}$ (°C)	661
$T_{10^{7.6}}$ (°C)	758
$\alpha_{-30/+70}$ ($10^{-7}/K$)	63
$\alpha_{100/300}$ ($10^{-7}/K$)	75
λ [W/(m·K)]	0.804
C_p [kJ/(kg·K)]	0.489

部分分散 Partial dispersions	
$n_c - n_t$	0.028522
$n_d - n_c$	0.012483
$n_F - n_d$	0.031715
$n_g - n_F$	0.028235
$n_{c'} - n_t$	0.030451
$n_e - n_{c'}$	0.020924
$n_{F'} - n_e$	0.024147
$n_g - n_{F'}$	0.025433

機械的性質 Mechanical Properties	
H_K	460 (5)
F_A	240
E (GPa)	92
G (GPa)	36.7
μ	0.258
σ_b (MPa)	73

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.6453	$P'_{c,t}$	0.6756
$P_{d,c}$	0.2824	$P'_{d,c}$	0.2342
$P_{e,d}$	0.2346	$P'_{e,d}$	0.2301
$P_{F,e}$	0.4829	$P'_{F,e}$	0.5358
$P_{g,F}$	0.6388	$P'_{g,F}$	0.5643
$P_{h,g}$	0.5969	$P'_{h,g}$	0.5854
$P_{i,h}$		$P'_{i,h}$	

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	0.3	-2.3
-20/ 0	0.5	-1.7
0/+20	0.8	-1.1
+20/+40	1.1	-0.5
+40/+60	1.5	0.0
+60/+80	1.8	0.5

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	2.91

比重 Specific Gravity	
d	3.94

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0018
$\Delta P_{c,A'}$	-0.0050
$\Delta P_{g,d}$	0.0322
$\Delta P_{g,F}$	0.0282
$\Delta P_{i,g}$	

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	E-FDS1	N-SF66	(S-NPH2)	E-SSFH1	H-ZF62
Code	923-209	923-209	923-189	923-205	923-209
作成 20110509					

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	(440)/385

着色度 Coloration of Internal Transmittance (内部透過率)	
$\lambda \tau 80 / \lambda \tau 5$	427/386