

FCD10A

459-902

$n_d = 1.45860$ $\nu_d = 90.20$ $n_F - n_C = 0.005084$
 $n_e = 1.45981$ $\nu_e = 89.75$ $n_{F'} - n_{C'} = 0.005123$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.45279
n_s	852.11	1.45426
$n_{A'}$	768.19	1.45525
n_r	706.52	1.45615
n_c	656.27	1.45704
$n_{c'}$	643.85	1.45729
n_{633}	632.80	1.45752
n_D	589.29	1.45855
n_d	587.56	1.45860
n_e	546.07	1.45981
n_F	486.13	1.46212
$n_{F'}$	479.99	1.46241
n_g	435.84	1.46484
n_h	404.66	1.46708
n_i	365.01	1.47083

分散式の定数 Constants of dispersion formula	
A_0	2.1085888
A_1	$-4.6553722 \times 10^{-3}$
A_2	6.9547480×10^{-3}
A_3	3.2184141×10^{-5}
A_4	5.2670946×10^{-6}
A_5	$-2.7164844 \times 10^{-7}$

部分分散 Partial dispersions	
$n_c - n_t$	0.004248
$n_d - n_c$	0.001558
$n_F - n_d$	0.003526
$n_g - n_F$	0.002721
$n_{c'} - n_t$	0.004496
$n_e - n_{c'}$	0.002524
$n_{F'} - n_e$	0.002599
$n_g - n_{F'}$	0.002434

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.8356	$P'_{c,t}$	0.8776
$P_{d,c}$	0.3065	$P'_{d,c}$	0.2557
$P_{e,d}$	0.2388	$P'_{e,d}$	0.2370
$P_{F,e}$	0.4548	$P'_{F,e}$	0.5073
$P_{g,F}$	0.5352	$P'_{g,F}$	0.4751
$P_{h,g}$	0.4394	$P'_{h,g}$	0.4361
$P_{i,h}$	0.7384	$P'_{i,h}$	0.7328

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.1317
$\Delta P_{c,A'}$	-0.0337
$\Delta P_{g,d}$	0.0626
$\Delta P_{g,F}$	0.0494
$\Delta P_{i,g}$	0.2348

化学的性質 Chemical Properties	
D_W	1
D_A	2
T_{Blue}	5
D_{NaOH}	5
D_{STPP}	5
D_0	5
D_H	

熱的性質 Thermal Properties	
T_g (°C)	417
T_s (°C)	455
$T_{10^{14.5}}$ (°C)	398
$T_{10^{13}}$ (°C)	411
$T_{10^{7.6}}$ (°C)	601
$\alpha_{-30/+70}$ ($10^{-7}/K$)	141
$\alpha_{100/300}$ ($10^{-7}/K$)	165
λ [W/(m·K)]	0.861
C_p [kJ/(kg·K)]	0.689

機械的性質 Mechanical Properties	
H_K	350 (4)
F_A	420
E (GPa)	73
G (GPa)	27.9
μ	0.300
σ_b (MPa)	45

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	-5.4	-7.4
-20/ 0	-5.9	-7.5
0/+20	-6.2	-7.6
+20/+40	-6.5	-7.7
+40/+60	-6.7	-7.8
+60/+80	-6.9	-7.8

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	0.58

比重 Specific Gravity	
d	3.63

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	FCD10A				
Code	459-902				
作成 201104					

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.999	0.998
1500	0.999	0.998
1400	0.999	0.999
1300	0.999	0.999
1200	0.999	0.999
1100	0.999	0.998
1060	0.999	0.997
1050	0.999	0.997
1000	0.999	0.997
950	0.998	0.997
900	0.998	0.997
850	0.999	0.997
830	0.999	0.998
800	0.999	0.998
780	0.999	0.998
750	0.999	0.998
700	0.999	0.999
650	0.999	0.999
600	0.999	0.999
550	0.999	0.999
500	0.999	0.999
480	0.999	0.999
460	0.999	0.997
440	0.998	0.996
420	0.998	0.996
400	0.998	0.995
390	0.997	0.994
380	0.995	0.990
370	0.992	0.983
360	0.984	0.968
350	0.967	0.935
340	0.931	0.867
330	0.862	0.744
320	0.749	0.561
310	0.589	0.347
300	0.407	0.166
290	0.243	0.059
280	0.127	0.016

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	340/290

着色度 Coloration of Internal Transmittance (内部透過率)	
$\lambda \tau 80 / \lambda \tau 5$	334/289