

E-FD10

728-283

$n_d = 1.72825$ $\nu_d = 28.32$ $n_F - n_C = 0.025715$
 $n_e = 1.73432$ $\nu_e = 28.10$ $n_{F'} - n_{C'} = 0.026133$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.70319
n_s	852.11	1.70875
$n_{A'}$	768.19	1.71284
n_r	706.52	1.71677
n_c	656.27	1.72082
$n_{c'}$	643.85	1.72198
n_{633}	632.80	1.72307
n_D	589.29	1.72803
n_d	587.56	1.72825
n_e	546.07	1.73432
n_F	486.13	1.74654
$n_{F'}$	479.99	1.74811
n_g	435.84	1.76211
n_h	404.66	1.77609
n_i	365.01	

分散式の定数 Constants of dispersion formula	
A_0	2.8815180
A_1	$-1.3228312 \times 10^{-2}$
A_2	3.1455590×10^{-2}
A_3	2.6851666×10^{-3}
A_4	$-2.2577544 \times 10^{-4}$
A_5	2.4693268×10^{-5}

部分分散 Partial dispersions	
$n_c - n_t$	0.017628
$n_d - n_c$	0.007430
$n_F - n_d$	0.018285
$n_g - n_F$	0.015577
$n_{c'} - n_t$	0.018785
$n_e - n_{c'}$	0.012343
$n_{F'} - n_e$	0.013790
$n_g - n_{F'}$	0.014002

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.6855	$P'_{c,t}$	0.7188
$P_{d,c}$	0.2889	$P'_{d,c}$	0.2400
$P_{e,d}$	0.2360	$P'_{e,d}$	0.2323
$P_{F,e}$	0.4750	$P'_{F,e}$	0.5277
$P_{g,F}$	0.6058	$P'_{g,F}$	0.5358
$P_{h,g}$	0.5437	$P'_{h,g}$	0.5350
$P_{i,h}$		$P'_{i,h}$	

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0073
$\Delta P_{c,A'}$	-0.0010
$\Delta P_{g,d}$	0.0096
$\Delta P_{g,F}$	0.0085
$\Delta P_{i,g}$	

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

熱的性質 Thermal Properties	
T_g (°C)	592
T_s (°C)	634
$T_{10^{14.5}}$ (°C)	565
$T_{10^{13}}$ (°C)	583
$T_{10^{7.6}}$ (°C)	681
$\alpha_{-30/+70}$ ($10^{-7}/K$)	90
$\alpha_{100/300}$ ($10^{-7}/K$)	109
λ [W/(m·K)]	0.993
C_p [kJ/(kg·K)]	0.680

機械的性質 Mechanical Properties	
H_K	545 (5)
F_A	150
E (GPa)	88
G (GPa)	34.9
μ	0.256
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	1.0	-1.3
-20/ 0	1.1	-0.9
0/+20	1.2	-0.5
+20/+40	1.3	-0.2
+40/+60	1.5	0.2
+60/+80	1.6	0.5

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

比重 Specific Gravity	
d	3.07

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	E-FD10	N-SF10	S-TIH10	E-SF10	H-ZF4
Code	728-283	728-285	728-285	728-285	728-283
作成 201104					

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.998	0.995
1500	0.998	0.995
1400	0.997	0.994
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	0.998
800	0.999	0.998
780	0.999	0.998
750	0.999	0.998
700	0.997	0.995
650	0.997	0.994
600	0.998	0.996
550	0.997	0.994
500	0.993	0.985
480	0.990	0.980
460	0.986	0.973
440	0.982	0.964
420	0.968	0.937
400	0.923	0.853
390	0.856	0.733
380	0.705	0.497
370	0.409	0.168
360		
350		
340		
330		
320		
310		
300		
290		
280		
着色度 Coloration Code		
$\lambda 80 (\lambda 70) / \lambda 5$	420/365	
着色度 (内部透過率) Coloration of Internal Transmittance		
$\lambda \tau 80 / \lambda \tau 5$	395/365	