

E-FD13

741-278

$n_d = 1.74077$ $\nu_d = 27.76$ $n_F - n_C = 0.026685$
 $n_e = 1.74707$ $\nu_e = 27.54$ $n_{F'} - n_{C'} = 0.027125$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.71485
n_s	852.11	1.72059
$n_{A'}$	768.19	1.72482
n_r	706.52	1.72888
n_c	656.27	1.73307
$n_{c'}$	643.85	1.73427
n_{633}	632.80	1.73540
n_D	589.29	1.74054
n_d	587.56	1.74077
n_e	546.07	1.74707
n_F	486.13	1.75976
$n_{F'}$	479.99	1.76139
n_g	435.84	1.77597
n_h	404.66	1.79056
n_i	365.01	

分散式の定数 Constants of dispersion formula	
A_0	2.9205906
A_1	$-1.3681618 \times 10^{-2}$
A_2	3.2567760×10^{-2}
A_3	2.8725519×10^{-3}
A_4	$-2.4277107 \times 10^{-4}$
A_5	2.6614514×10^{-5}

部分分散 Partial dispersions	
$n_c - n_t$	0.018219
$n_d - n_c$	0.007699
$n_F - n_d$	0.018986
$n_g - n_F$	0.016214
$n_{c'} - n_t$	0.019417
$n_e - n_{c'}$	0.012798
$n_{F'} - n_e$	0.014327
$n_g - n_{F'}$	0.014576

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.6827	$P'_{c,t}$	0.7158
$P_{d,c}$	0.2885	$P'_{d,c}$	0.2397
$P_{e,d}$	0.2360	$P'_{e,d}$	0.2321
$P_{F,e}$	0.4755	$P'_{F,e}$	0.5282
$P_{g,F}$	0.6076	$P'_{g,F}$	0.5374
$P_{h,g}$	0.5466	$P'_{h,g}$	0.5377
$P_{i,h}$		$P'_{i,h}$	

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0071
$\Delta P_{c,A'}$	-0.0012
$\Delta P_{g,d}$	0.0106
$\Delta P_{g,F}$	0.0093
$\Delta P_{i,g}$	

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)	597
T_s (°C)	642
$T_{10^{14.5}}$ (°C)	572
$T_{10^{13}}$ (°C)	588
$T_{10^{7.6}}$ (°C)	686
$\alpha_{-30/+70}$ ($10^{-7}/K$)	91
$\alpha_{100/300}$ ($10^{-7}/K$)	110
λ [W/(m·K)]	0.965
C_p [kJ/(kg·K)]	0.689

機械的性質 Mechanical Properties	
H_K	510 (5)
F_A	180
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	1.0	-1.3
-20/ 0	1.1	-0.9
0/+20	1.2	-0.5
+20/+40	1.3	-0.2
+40/+60	1.3	0.0
+60/+80	1.4	0.3

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

比重 Specific Gravity	
d	3.11

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.999	0.997
1500	0.999	0.997
1400	0.999	0.998
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	0.998
780	0.999	0.998
750	0.998	0.996
700	0.997	0.995
650	0.995	0.991
600	0.998	0.995
550	0.997	0.995
500	0.993	0.985
480	0.990	0.979
460	0.986	0.973
440	0.980	0.961
420	0.967	0.936
400	0.919	0.845
390	0.849	0.722
380	0.698	0.487
370	0.409	0.167
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	
$\lambda \tau 80/\lambda \tau 5$	396/365

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	E-FD13		S-TIH13	E-SF13	H-ZF50
Code	741-278		741-278	741-278	741-278
作成 201104					