

M-FD80

689-312

$n_d = 1.68893$ $\nu_d = 31.16$ $n_F - n_C = 0.022110$
 $n_e = 1.69415$ $\nu_e = 30.91$ $n_{F'} - n_{C'} = 0.022459$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.66711
n_s	852.11	1.67201
$n_{A'}$	768.19	1.67559
n_r	706.52	1.67901
n_c	656.27	1.68252
$n_{c'}$	643.85	1.68352
n_{633}	632.80	1.68446
n_D	589.29	1.68874
n_d	587.56	1.68893
n_e	546.07	1.69415
n_F	486.13	1.70463
$n_{F'}$	479.99	1.70598
n_g	435.84	1.71798
n_h	404.66	1.72994
n_i	365.01	1.75267

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

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.997	0.994
1500	0.997	0.994
1400	0.995	0.990
1300	0.999	0.997
1200	0.999	0.998
1100	0.999	0.998
1060	0.999	0.998
1050	0.999	0.998
1000	0.999	0.997
950	0.999	0.997
900	0.999	0.998
850	0.999	0.998
830	0.999	0.998
800	0.998	0.996
780	0.998	0.996
750	0.998	0.996
700	0.997	0.994
650	0.997	0.994
600	0.997	0.994
550	0.995	0.990
500	0.988	0.976
480	0.984	0.968
460	0.978	0.957
440	0.970	0.941
420	0.955	0.911
400	0.914	0.836
390	0.858	0.736
380	0.723	0.523
370	0.461	0.213
360	0.166	0.027
350		
340		
330		
320		
310		
300		
290		
280		

分散式の定数 Constants of dispersion formula	
A_0	2.7616380
A_1	$-1.1326330 \times 10^{-2}$
A_2	2.8653460×10^{-2}
A_3	1.5290380×10^{-3}
A_4	$-8.7435770 \times 10^{-5}$
A_5	1.4965790×10^{-5}

熱的性質 Thermal Properties	
T_g (°C)	454
T_s (°C)	498
$T_{10^{14.5}}$ (°C)	434
$T_{10^{13}}$ (°C)	449
$T_{10^{7.6}}$ (°C)	545
$\alpha_{-30/+70}$ ($10^{-7}/K$)	115
$\alpha_{100/300}$ ($10^{-7}/K$)	143
λ [W/(m·K)]	0.731
C_p [kJ/(kg·K)]	0.637

部分分散 Partial dispersions	
$n_c - n_t$	0.015414
$n_d - n_c$	0.006411
$n_F - n_d$	0.015699
$n_g - n_F$	0.013347
$n_{c'} - n_t$	0.016415
$n_e - n_{c'}$	0.010629
$n_{F'} - n_e$	0.011830
$n_g - n_{F'}$	0.011997

機械的性質 Mechanical Properties	
H_K	379 (4)
F_A	360
E (GPa)	75
G (GPa)	29.5
μ	0.265
σ_b (MPa)	60

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.6972	$P'_{c',t}$	0.7309
$P_{d,c}$	0.2900	$P'_{d,c'}$	0.2409
$P_{e,d}$	0.2360	$P'_{e,d}$	0.2324
$P_{F,e}$	0.4740	$P'_{F',e}$	0.5267
$P_{g,F}$	0.6037	$P'_{g,F'}$	0.5342
$P_{h,g}$	0.5411	$P'_{h,g}$	0.5327
$P_{i,h}$	1.0281	$P'_{i,h}$	1.0122

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	-2.4	-4.7
-20/ 0	-2.7	-4.6
0/+20	-2.9	-4.5
+20/+40	-3.0	-4.5
+40/+60	-3.1	-4.4
+60/+80	-3.2	-4.4

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	2.66

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0056
$\Delta P_{c,A'}$	-0.0012
$\Delta P_{g,d}$	0.0129
$\Delta P_{g,F}$	0.0115
$\Delta P_{i,g}$	0.1037

比重 Specific Gravity	
d	3.26

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	425/365
着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	395/362

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	M-FD80	P-SF8	L-TIM28		D-ZF10
Code	689-312	689-313	689-311		689-311
作成 201104					