

M-TAFD51

821-427

$n_d = 1.82080$ $\nu_d = 42.71$ $n_F - n_C = 0.019220$
 $n_e = 1.82537$ $\nu_e = 42.46$ $n_{F'} - n_{C'} = 0.019441$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.80059
n_s	852.11	1.80534
$n_{A'}$	768.19	1.80871
n_r	706.52	1.81187
n_c	656.27	1.81507
$n_{c'}$	643.85	1.81597
n_{633}	632.80	1.81682
n_D	589.29	1.82063
n_d	587.56	1.82080
n_e	546.07	1.82537
n_F	486.13	1.83429
$n_{F'}$	479.99	1.83541
n_g	435.84	1.84513
n_h	404.66	1.85433
n_i	365.01	1.87050

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

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.998	0.996
1500	0.998	0.996
1400	0.999	0.997
1300	0.999	0.999
1200	0.999	0.999
1100	0.999	0.998
1060	0.999	0.997
1050	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.998
850	0.999	0.999
830	0.999	0.998
800	0.999	0.999
780	0.998	0.997
750	0.998	0.996
700	0.999	0.999
650	0.999	0.999
600	0.999	0.999
550	0.999	0.999
500	0.996	0.992
480	0.993	0.987
460	0.990	0.979
440	0.985	0.970
420	0.977	0.954
400	0.957	0.916
390	0.936	0.875
380	0.898	0.806
370	0.830	0.689
360	0.703	0.494
350	0.495	0.245
340	0.252	0.063
330		
320		
310		
300		
290		
280		

着色度 Coloration Code	
λ 80 (λ 70) / λ 5	420/340
着色度 (内部透過率) Coloration of Internal Transmittance	
λ τ 80 / λ τ 5	379/339

分散式の定数 Constants of dispersion formula	
A_0	3.2276820
A_1	$-1.4538160 \times 10^{-2}$
A_2	2.9212100×10^{-2}
A_3	1.0570620×10^{-3}
A_4	$-4.7871620 \times 10^{-5}$
A_5	4.5572390×10^{-6}

熱的性質 Thermal Properties	
T_g (°C)	600
T_s (°C)	643
$T_{10^{14.5}}$ (°C)	580
$T_{10^{13}}$ (°C)	594
$T_{10^{7.6}}$ (°C)	681
$\alpha_{-30/+70}$ ($10^{-7}/K$)	64
$\alpha_{100/300}$ ($10^{-7}/K$)	77
λ [W/(m·K)]	0.840
C_p [kJ/(kg·K)]	0.462

部分分散 Partial dispersions	
$n_c - n_t$	0.014484
$n_d - n_c$	0.005729
$n_F - n_d$	0.013491
$n_g - n_F$	0.010843
$n_{c'} - n_t$	0.015387
$n_e - n_{c'}$	0.009396
$n_{F'} - n_e$	0.010045
$n_g - n_{F'}$	0.009719

機械的性質 Mechanical Properties	
H_K	670 (7)
F_A	70
E (GPa)	121
G (GPa)	46.4
μ	0.300
σ_b (MPa)	117

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7536	$P'_{c,t}$	0.7915
$P_{d,c}$	0.2981	$P'_{d,c}$	0.2482
$P_{e,d}$	0.2378	$P'_{e,d}$	0.2351
$P_{F,e}$	0.4642	$P'_{F,e}$	0.5167
$P_{g,F}$	0.5642	$P'_{g,F}$	0.4999
$P_{h,g}$	0.4787	$P'_{h,g}$	0.4733
$P_{i,h}$	0.8412	$P'_{i,h}$	0.8316

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	5.9	3.4
-20/ 0	5.9	3.8
0/+20	6.0	4.2
+20/+40	6.1	4.5
+40/+60	6.2	4.8
+60/+80	6.4	5.1

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	1.74

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0081
$\Delta P_{c,A'}$	0.0020
$\Delta P_{g,d}$	-0.0084
$\Delta P_{g,F}$	-0.0072
$\Delta P_{i,g}$	-0.0434

比重 Specific Gravity	
d	5.01

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	M-TAFD51			Q-LASFH19S	
Code	821-427			821-427	
作成 201104					