

MC-TAFD51-50

821-427

$n_d = 1.82130$ $\nu_d = 42.72$ $n_F - n_C = 0.019223$
 $n_e = 1.82587$ $\nu_e = 42.47$ $n_{F'} - n_{C'} = 0.019444$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.80105
n_s	852.11	1.80582
$n_{A'}$	768.19	1.80920
n_r	706.52	1.81237
n_c	656.27	1.81557
$n_{c'}$	643.85	1.81647
n_{633}	632.80	1.81732
n_D	589.29	1.82113
n_d	587.56	1.82130
n_e	546.07	1.82587
n_F	486.13	1.83479
$n_{F'}$	479.99	1.83592
n_g	435.84	1.84565
n_h	404.66	1.85487
n_i	365.01	1.87105

分散式の定数 Constants of dispersion formula	
A_0	3.2288052
A_1	$-1.4433046 \times 10^{-2}$
A_2	2.9863488×10^{-2}
A_3	8.2119282×10^{-4}
A_4	$-1.0943492 \times 10^{-5}$
A_5	2.5804939×10^{-6}

部分分散 Partial dispersions	
$n_c - n_t$	0.014520
$n_d - n_c$	0.005730
$n_F - n_d$	0.013493
$n_g - n_F$	0.010858
$n_{c'} - n_t$	0.015424
$n_e - n_{c'}$	0.010299
$n_{F'} - n_e$	0.010049
$n_g - n_{F'}$	0.009733

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7553	$P'_{c,t}$	0.7933
$P_{d,c}$	0.2981	$P'_{d,c}$	0.2482
$P_{e,d}$	0.2377	$P'_{e,d}$	0.2350
$P_{F,e}$	0.4642	$P'_{F,e}$	0.5168
$P_{g,F}$	0.5648	$P'_{g,F}$	0.5006
$P_{h,g}$	0.4796	$P'_{h,g}$	0.4741
$P_{i,h}$	0.8420	$P'_{i,h}$	0.8324

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0098
$\Delta P_{c,A'}$	0.0024
$\Delta P_{e,d}$	-0.0076
$\Delta P_{g,F}$	-0.0065
$\Delta P_{i,g}$	-0.0416

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

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

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

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

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate	
β_c	157
β_d	156
β_F	158
β_g	159

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

比重 Specific Gravity	
d	5.01

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.998	0.996
1500	0.998	0.996
1400	0.998	0.997
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	0.998
830	0.999	0.999
800	0.999	0.999
780	0.999	0.999
750	0.999	0.999
700	0.999	0.999
650	0.999	0.998
600	0.999	0.998
550	0.999	0.997
500	0.997	0.995
480	0.996	0.993
460	0.995	0.990
440	0.993	0.985
420	0.989	0.979
400	0.980	0.960
390	0.969	0.940
380	0.949	0.900
370	0.906	0.821
360	0.816	0.666
350	0.608	0.369
340	0.296	0.088
330		
320		
310		
300		
290		
280		

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	400/340

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	368/337

備考 Remarks	
作成 201104	