

MP-TAF401

774-472

$n_d = 1.77377$ $\nu_d = 47.17$ $n_F - n_C = 0.016405$
 $n_e = 1.77767$ $\nu_e = 46.92$ $n_{F'} - n_{C'} = 0.016575$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.75610
n_s	852.11	1.76034
$n_{A'}$	768.19	1.76331
n_r	706.52	1.76607
n_c	656.27	1.76884
$n_{c'}$	643.85	1.76962
n_{633}	632.80	1.77035
n_D	589.29	1.77362
n_d	587.56	1.77377
n_e	546.07	1.77767
n_F	486.13	1.78524
$n_{F'}$	479.99	1.78619
n_g	435.84	1.79436
n_h	404.66	1.80202
n_i	365.01	1.81527

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

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.997	0.994
1500	0.997	0.995
1400	0.998	0.995
1300	0.998	0.996
1200	0.998	0.996
1100	0.998	0.995
1060	0.998	0.995
1050	0.997	0.995
1000	0.997	0.994
950	0.997	0.995
900	0.997	0.994
850	0.996	0.993
830	0.996	0.992
800	0.996	0.992
780	0.997	0.993
750	0.996	0.993
700	0.998	0.997
650	0.999	0.998
600	0.999	0.999
550	0.999	0.999
500	0.998	0.997
480	0.997	0.995
460	0.996	0.992
440	0.993	0.987
420	0.990	0.981
400	0.982	0.965
390	0.974	0.948
380	0.958	0.918
370	0.929	0.864
360	0.877	0.770
350	0.791	0.626
340	0.665	0.443
330	0.490	0.240
320	0.284	0.081
310	0.110	0.012
300		
290		
280		

分散式の定数 Constants of dispersion formula	
A_0	3.0727900
A_1	$-1.3663850 \times 10^{-2}$
A_2	2.5273460×10^{-2}
A_3	6.1218200×10^{-4}
A_4	$-1.1470450 \times 10^{-5}$
A_5	1.5430000×10^{-6}

熱的性質 Thermal Properties	
T_g (°C)	569
T_s (°C)	614
$T_{10^{14.5}}$ (°C)	548
$T_{10^{13}}$ (°C)	565
$T_{10^{7.6}}$ (°C)	653
$\alpha_{-30/+70^\circ\text{C}}$ ($10^{-7}/\text{K}$)	61
$\alpha_{100/300^\circ\text{C}}$ ($10^{-7}/\text{K}$)	77
λ [W/(m·K)]	0.752
C_p [kJ/(kg·K)]	0.444

部分分散 Partial dispersions	
$n_C - n_t$	0.012737
$n_d - n_C$	0.004928
$n_F - n_d$	0.011477
$n_g - n_F$	0.009114
$n_{c'} - n_t$	0.013516
$n_e - n_{c'}$	0.008055
$n_{F'} - n_e$	0.008520
$n_g - n_{F'}$	0.008165

機械的性質 Mechanical Properties	
H_K	793 (7)
F_A	60
E (GPa)	118
G (GPa)	45.5
μ	0.299
σ_b (MPa)	110

部分分散比 Partial dispersion rates			
$P_{C,t}$	0.7764	$P'_{C,t}$	0.8154
$P_{d,C}$	0.3004	$P'_{d,C}$	0.2503
$P_{e,d}$	0.2381	$P'_{e,d}$	0.2357
$P_{F,e}$	0.4615	$P'_{F,e}$	0.5140
$P_{g,F}$	0.5556	$P'_{g,F}$	0.4926
$P_{h,g}$	0.4668	$P'_{h,g}$	0.4620
$P_{i,h}$	0.8079	$P'_{i,h}$	0.7996

屈折率の温度係数 Thermal coefficient of refractive indices ($\times 10^{-6}/\text{K}$)		
(°C)	dn/dT (rel.)	dn/dT (abs.)
-40/-20	6.4	4.0
-20/ 0	6.4	4.4
0/+20	6.5	4.8
+20/+40	6.6	5.1
+40/+60	6.8	5.4
+60/+80	6.9	5.7

異常分散性 Anomalous dispersions	
$\Delta P_{C,t}$	0.0101
$\Delta P_{C,A'}$	0.0027
$\Delta P_{g,d}$	-0.0091
$\Delta P_{g,F}$	-0.0078
$\Delta P_{i,g}$	-0.0492

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate	
β_C	132
β_d	133
β_F	133
β_g	133

光弾性定数 Photoelastic Constant	
B ($10^{-12}/\text{Pa}$)	2.02

比重 Specific Gravity	
d	4.62

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	390/320

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	363/317

備考 Remarks	
作成 201104	