

# MC-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		
	$\lambda$ (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

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

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

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

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

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

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
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	61
$\alpha_{100/300}$ ( $10^{-7}/K$ )	77
$\lambda$ [W/(m·K)]	0.752
$C_p$ [kJ/(kg·K)]	0.444

機械的性質 Mechanical Properties	
$H_K$	793 (7)
$F_A$	60
$E$ (GPa)	118
$G$ (GPa)	45.5
$\mu$	0.299
$\sigma_b$ (MPa)	110

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	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

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate	
$\beta_c$	132
$\beta_d$	133
$\beta_F$	133
$\beta_g$	133

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

比重 Specific Gravity	
$d$	4.62

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 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	0.997	0.991
650	0.998	0.991
600	0.998	0.991
550	0.999	0.991
500	0.998	0.991
480	0.997	0.991
460	0.995	0.991
440	0.994	0.988
420	0.992	0.984
400	0.987	0.975
390	0.981	0.962
380	0.971	0.943
370	0.952	0.907
360	0.917	0.840
350	0.852	0.726
340	0.748	0.560
330	0.575	0.331
320	0.333	0.111
310		
300		
290		
280		

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	380/315

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	357/316

備考 Remarks	
作成 201104	