

# MC-TAFD305

# 851-401

$n_d = 1.85135$   $\nu_d = 40.10$   $n_F - n_C = 0.021229$   
 $n_e = 1.85639$   $\nu_e = 39.85$   $n_{F'} - n_{C'} = 0.021488$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.82942
$n_s$	852.11	1.83447
$n_{A'}$	768.19	1.83812
$n_r$	706.52	1.84155
$n_c$	656.27	1.84505
$n_{c'}$	643.85	1.84604
$n_{633}$	632.80	1.84697
$n_D$	589.29	1.85116
$n_d$	587.56	1.85135
$n_e$	546.07	1.85639
$n_F$	486.13	1.86628
$n_{F'}$	479.99	1.86753
$n_g$	435.84	1.87837
$n_h$	404.66	1.88868
$n_i$	365.01	1.90691

分散式の定数 Constants of dispersion formula	
$A_0$	3.3271840
$A_1$	$-1.3432420 \times 10^{-2}$
$A_2$	$3.3398000 \times 10^{-2}$
$A_3$	$1.0060470 \times 10^{-3}$
$A_4$	$-2.1369080 \times 10^{-5}$
$A_5$	$3.9725610 \times 10^{-6}$

部分分散 Partial dispersions	
$n_c - n_t$	0.015627
$n_d - n_c$	0.006297
$n_F - n_d$	0.014932
$n_g - n_F$	0.012087
$n_{c'} - n_t$	0.016617
$n_e - n_{c'}$	0.010350
$n_{F'} - n_e$	0.011138
$n_g - n_{F'}$	0.010838

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7361	$P'_{c,t}$	0.7733
$P_{d,c}$	0.2966	$P'_{d,c}$	0.2470
$P_{e,d}$	0.2376	$P'_{e,d}$	0.2347
$P_{F,e}$	0.4658	$P'_{F,e}$	0.5183
$P_{g,F}$	0.5694	$P'_{g,F}$	0.5044
$P_{h,g}$	0.4859	$P'_{h,g}$	0.4800
$P_{i,h}$	0.8588	$P'_{i,h}$	0.8484

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0028
$\Delta P_{c,A'}$	0.0012
$\Delta P_{e,d}$	-0.0076
$\Delta P_{g,F}$	-0.0067
$\Delta P_{i,g}$	-0.0417

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

熱的性質 Thermal Properties	
$T_g$ (°C)	612
$T_s$ (°C)	652
$T_{10^{14.5}}$ (°C)	588
$T_{10^{13}}$ (°C)	606
$T_{10^{7.6}}$ (°C)	693
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	63
$\alpha_{100/300}$ ( $10^{-7}/K$ )	78
$\lambda$ [W/(m·K)]	0.738
$C_p$ [kJ/(kg·K)]	0.401

機械的性質 Mechanical Properties	
$H_K$	620 (6)
$F_A$	60
$E$ (GPa)	116
$G$ (GPa)	44.5
$\mu$	0.308
$\sigma_b$ (MPa)	109

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	6.9	4.4
-20/ 0	7.1	5.0
0/+20	7.3	5.5
+20/+40	7.5	5.9
+40/+60	7.7	6.2
+60/+80	7.8	6.6

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate	
$\beta_c$	119
$\beta_d$	119
$\beta_F$	120
$\beta_g$	120

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	1.86

比重 Specific Gravity	
$d$	5.25

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.998	0.995
1500	0.998	0.996
1400	0.998	0.996
1300	0.998	0.996
1200	0.997	0.995
1100	0.997	0.994
1060	0.997	0.994
1050	0.997	0.994
1000	0.997	0.993
950	0.997	0.994
900	0.997	0.993
850	0.997	0.994
830	0.998	0.996
800	0.997	0.994
780	0.997	0.995
750	0.998	0.995
700	0.999	0.995
650	0.999	0.995
600	0.999	0.996
550	0.999	0.997
500	0.997	0.995
480	0.995	0.990
460	0.993	0.986
440	0.989	0.979
420	0.985	0.970
400	0.969	0.939
390	0.952	0.906
380	0.919	0.845
370	0.851	0.724
360	0.714	0.509
350	0.452	0.204
340	0.155	0.024
330		
320		
310		
300		
290		
280		

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	(380)/345

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	376/343

備考 Remarks	
作成 201104	