

MC-PCD51-70

593-670

$n_d = 1.59271$ $\nu_d = 66.97$ $n_F - n_C = 0.008850$
 $n_e = 1.59482$ $\nu_e = 66.71$ $n_{F'} - n_{C'} = 0.008916$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.58247
n_s	852.11	1.58511
$n_{A'}$	768.19	1.58686
n_r	706.52	1.58844
n_c	656.27	1.59000
$n_{c'}$	643.85	1.59043
n_{633}	632.80	1.59083
n_D	589.29	1.59263
n_d	587.56	1.59271
n_e	546.07	1.59482
n_F	486.13	1.59885
$n_{F'}$	479.99	1.59934
n_g	435.84	1.60360
n_h	404.66	1.60751
n_i	365.01	1.61413

分散式の定数 Constants of dispersion formula	
A_0	2.5025436
A_1	$-1.0321437 \times 10^{-2}$
A_2	1.2433636×10^{-2}
A_3	2.1866535×10^{-4}
A_4	$-5.5793977 \times 10^{-6}$
A_5	3.0188383×10^{-7}

部分分散 Partial dispersions	
$n_c - n_t$	0.007521
$n_d - n_c$	0.002712
$n_F - n_d$	0.006138
$n_g - n_F$	0.004750
$n_{c'} - n_t$	0.007954
$n_e - n_{c'}$	0.004391
$n_{F'} - n_e$	0.004525
$n_g - n_{F'}$	0.004251

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.8498	$P'_{c',t}$	0.8921
$P_{d,c}$	0.3064	$P'_{d,c'}$	0.2556
$P_{e,d}$	0.2386	$P'_{e,d}$	0.2369
$P_{F,e}$	0.4549	$P'_{F',e}$	0.5075
$P_{g,F}$	0.5367	$P'_{g,F'}$	0.4768
$P_{h,g}$	0.4424	$P'_{h,g}$	0.4391
$P_{i,h}$	0.7476	$P'_{i,h}$	0.7420

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.0090
$\Delta P_{c,A'}$	-0.0040
$\Delta P_{e,d}$	0.0112
$\Delta P_{g,F}$	0.0090
$\Delta P_{i,g}$	0.0413

化学的性質 Chemical Properties	
D_W	1
D_A	4
T_{Blue}	+
D_{NaOH}	3
D_{STPP}	3
D_o	5
D_H	1

熱的性質 Thermal Properties	
T_g (°C)	499
T_s (°C)	541
$T_{10^{14.5}}$ (°C)	475
$T_{10^{13}}$ (°C)	496
$T_{10^{7.6}}$ (°C)	580
$\alpha_{-30/+70}$ ($10^{-7}/K$)	93
$\alpha_{100/300}$ ($10^{-7}/K$)	116
λ [W/(m·K)]	0.882
C_p [kJ/(kg·K)]	0.709

機械的性質 Mechanical Properties	
H_K	440 (4)
F_A	270
E (GPa)	89
G (GPa)	34.8
μ	0.271
σ_b (MPa)	61

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	-0.5	-2.6
-20/0	-0.6	-2.4
0/+20	-0.7	-2.2
+20/+40	-0.7	-2.1
+40/+60	-0.7	-1.9
+60/+80	-0.7	-1.7

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate	
β_c	82
β_d	82
β_F	82
β_g	82

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	1.48

比重 Specific Gravity	
d	3.14

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.996	0.992
1500	0.996	0.992
1400	0.997	0.994
1300	0.999	0.998
1200	0.999	0.998
1100	0.999	0.998
1060	0.999	0.999
1050	0.999	0.998
1000	0.999	0.998
950	0.999	0.999
900	0.999	0.999
850	0.999	0.999
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	0.999
600	0.999	0.999
550	0.999	0.999
500	0.999	0.999
480	0.999	0.998
460	0.999	0.997
440	0.998	0.997
420	0.998	0.996
400	0.998	0.996
390	0.997	0.994
380	0.995	0.990
370	0.992	0.983
360	0.982	0.964
350	0.967	0.936
340	0.940	0.884
330	0.890	0.800
320	0.830	0.690
310	0.740	0.550
300	0.640	0.410
290	0.540	0.300
280	0.440	0.190

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	340/265

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	330/261

備考 Remarks	
作成 201104	