

MC-NBF1

743-493

$n_d = 1.74330$ $\nu_d = 49.33$ $n_F - n_C = 0.015069$
 $n_e = 1.74689$ $\nu_e = 49.07$ $n_{F'} - n_{C'} = 0.015221$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.72693
n_s	852.11	1.73091
$n_{A'}$	768.19	1.73367
n_r	706.52	1.73621
n_c	656.27	1.73876
$n_{c'}$	643.85	1.73948
n_{633}	632.80	1.74015
n_D	589.29	1.74317
n_d	587.56	1.74330
n_e	546.07	1.74689
n_F	486.13	1.75383
$n_{F'}$	479.99	1.75470
n_g	435.84	1.76216
n_h	404.66	1.76913
n_i	365.01	1.78115

分散式の定数 Constants of dispersion formula	
A_0	2.9752450
A_1	$-1.4250160 \times 10^{-2}$
A_2	2.1400740×10^{-2}
A_3	9.7553370×10^{-4}
A_4	$-6.9795300 \times 10^{-5}$
A_5	4.1149240×10^{-6}

部分分散 Partial dispersions	
$n_c - n_t$	0.011839
$n_d - n_c$	0.004535
$n_F - n_d$	0.010534
$n_g - n_F$	0.008328
$n_{c'} - n_t$	0.012557
$n_e - n_{c'}$	0.007407
$n_{F'} - n_e$	0.007814
$n_g - n_{F'}$	0.007458

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7857	$P'_{c',t}$	0.8250
$P_{d,c}$	0.3009	$P'_{d,c'}$	0.2508
$P_{e,d}$	0.2382	$P'_{e,d}$	0.2359
$P_{F,e}$	0.4608	$P'_{F',e}$	0.5134
$P_{g,F}$	0.5527	$P'_{g,F'}$	0.4900
$P_{h,g}$	0.4623	$P'_{h,g}$	0.4577
$P_{i,h}$	0.7975	$P'_{i,h}$	0.7896

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0093
$\Delta P_{c,A'}$	0.0017
$\Delta P_{g,d}$	-0.0076
$\Delta P_{g,F}$	-0.0068
$\Delta P_{i,g}$	-0.0449

化学的性質 Chemical Properties	
D_W	1
D_A	4
T_{Blue}	4
D_{NaOH}	1
D_{STPP}	2
D_o	3
D_H	1

熱的性質 Thermal Properties	
T_g (°C)	560
T_s (°C)	600
$T_{10^{14.5}}$ (°C)	535
$T_{10^{13}}$ (°C)	552
$T_{10^{7.6}}$ (°C)	640
$\alpha_{-30/+70}$ ($10^{-7}/K$)	57
$\alpha_{100/300}$ ($10^{-7}/K$)	73
λ [W/(m·K)]	0.891
C_p [kJ/(kg·K)]	0.565

機械的性質 Mechanical Properties	
H_K	665 (7)
F_A	70
E (GPa)	111
G (GPa)	42.3
μ	0.307
σ_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	7.8	5.4
-20/ 0	7.8	5.8
0/+20	8.0	6.2
+20/+40	8.1	6.6
+40/+60	8.3	6.9
+60/+80	8.4	7.2

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate	
β_c	135
β_d	135
β_F	135
β_g	135

光弾性定数 Photoelastic Constant	
B ($10^{-12}/Pa$)	2.26

比重 Specific Gravity	
d	4.25

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.994	0.989
1500	0.994	0.988
1400	0.994	0.988
1300	0.998	0.996
1200	0.999	0.997
1100	0.999	0.997
1060	0.999	0.997
1050	0.999	0.997
1000	0.998	0.997
950	0.999	0.997
900	0.999	0.998
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	0.998
500	0.999	0.998
480	0.999	0.997
460	0.998	0.997
440	0.998	0.996
420	0.997	0.995
400	0.996	0.992
390	0.994	0.988
380	0.991	0.981
370	0.984	0.969
360	0.973	0.946
350	0.953	0.909
340	0.923	0.852
330	0.881	0.775
320	0.823	0.677
310	0.697	0.486
300	0.672	0.451
290	0.584	0.341
280	0.412	0.170

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	360/275

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	333/270

備考 Remarks	
作成 201104	