

# MC-BACD12

## 583-595

$n_d = 1.58313$   $\nu_d = 59.46$   $n_F - n_C = 0.009807$   
 $n_e = 1.58547$   $\nu_e = 59.22$   $n_{F'} - n_{C'} = 0.009887$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.57197
$n_s$	852.11	1.57481
$n_{A'}$	768.19	1.57671
$n_r$	706.52	1.57843
$n_c$	656.27	1.58014
$n_{c'}$	643.85	1.58061
$n_{633}$	632.80	1.58106
$n_D$	589.29	1.58304
$n_d$	587.56	1.58313
$n_e$	546.07	1.58547
$n_F$	486.13	1.58995
$n_{F'}$	479.99	1.59050
$n_g$	435.84	1.59525
$n_h$	404.66	1.59963
$n_i$	365.01	1.60713

分散式の定数 Constants of dispersion formula	
$A_0$	2.4687810
$A_1$	$-1.0626390 \times 10^{-2}$
$A_2$	$1.3251840 \times 10^{-2}$
$A_3$	$4.0486120 \times 10^{-4}$
$A_4$	$-2.9747990 \times 10^{-5}$
$A_5$	$1.8258840 \times 10^{-6}$

部分分散 Partial dispersions	
$n_c - n_t$	0.008165
$n_d - n_c$	0.002992
$n_F - n_d$	0.006815
$n_g - n_F$	0.005300
$n_{c'} - n_t$	0.008641
$n_e - n_{c'}$	0.004855
$n_{F'} - n_e$	0.005032
$n_g - n_{F'}$	0.004744

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.8326	$P'_{c,t}$	0.8740
$P_{d,c}$	0.3051	$P'_{d,c}$	0.2545
$P_{e,d}$	0.2385	$P'_{e,d}$	0.2366
$P_{F,e}$	0.4564	$P'_{F,e}$	0.5090
$P_{g,F}$	0.5404	$P'_{g,F}$	0.4798
$P_{h,g}$	0.4475	$P'_{h,g}$	0.4439
$P_{i,h}$	0.7638	$P'_{i,h}$	0.7577

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0089
$\Delta P_{c,A'}$	0.0010
$\Delta P_{e,d}$	-0.0009
$\Delta P_{g,F}$	-0.0008
$\Delta P_{i,g}$	-0.0037

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

熱的性質 Thermal Properties	
$T_g$ (°C)	500
$T_s$ (°C)	548
$T_{10^{14.5}}$ (°C)	474
$T_{10^{13}}$ (°C)	495
$T_{10^{7.6}}$ (°C)	596
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	70
$\alpha_{100/300}$ ( $10^{-7}/K$ )	90
$\lambda$ [W/(m·K)]	1.117
$C_p$ [kJ/(kg·K)]	0.816

機械的性質 Mechanical Properties	
$H_K$	575 (6)
$F_A$	110
$E$ (GPa)	90
$G$ (GPa)	35.8
$\mu$	0.252
$\sigma_b$ (MPa)	112

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	3.5	1.4
-20/ 0	3.6	1.8
0/+20	3.7	2.1
+20/+40	3.8	2.4
+40/+60	3.8	2.6
+60/+80	3.8	2.7

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate	
$\beta_c$	85
$\beta_d$	85
$\beta_F$	85
$\beta_g$	85

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	2.24

比重 Specific Gravity	
$d$	3.01

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.995	0.990
1500	0.994	0.989
1400	0.991	0.981
1300	0.996	0.992
1200	0.996	0.992
1100	0.996	0.991
1060	0.995	0.990
1050	0.996	0.991
1000	0.996	0.991
950	0.996	0.991
900	0.996	0.991
850	0.996	0.992
830	0.996	0.992
800	0.996	0.993
780	0.997	0.994
750	0.998	0.996
700	0.999	0.997
650	0.999	0.998
600	0.999	0.997
550	0.999	0.997
500	0.999	0.997
480	0.999	0.997
460	0.999	0.999
440	0.999	0.998
420	0.999	0.999
400	0.999	0.999
390	0.997	0.994
380	0.996	0.991
370	0.994	0.989
360	0.989	0.977
350	0.978	0.956
340	0.951	0.904
330	0.903	0.816
320	0.823	0.677
310	0.681	0.464
300	0.493	0.243
290	0.286	0.082
280	0.122	0.015

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	340/290

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	329/287

備考 Remarks	
作成 201104	