

M-PCD51

592-670

$n_d = 1.59201$ $\nu_d = 67.02$ $n_F - n_C = 0.008834$
 $n_e = 1.59412$ $\nu_e = 66.76$ $n_{F'} - n_{C'} = 0.008900$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.58180
n_s	852.11	1.58444
$n_{A'}$	768.19	1.58619
n_r	706.52	1.58776
n_c	656.27	1.58931
$n_{c'}$	643.85	1.58974
n_{633}	632.80	1.59014
n_D	589.29	1.59193
n_d	587.56	1.59201
n_e	546.07	1.59412
n_F	486.13	1.59814
$n_{F'}$	479.99	1.59864
n_g	435.84	1.60287
n_h	404.66	1.60677
n_i	365.01	1.61338

化学的性質 Chemical Properties	
D_W	1
D_A	4
T_{Blue}	+
D_{NaOH}	3
D_{STPP}	3
D_0	5
D_H	1

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.999	0.997
1500	0.998	0.997
1400	0.999	0.998
1300	0.999	0.999
1200	0.999	0.999
1100	0.999	0.999
1060	0.999	0.998
1050	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.998	0.999
850	0.998	0.998
830	0.998	0.999
800	0.998	0.998
780	0.998	0.998
750	0.998	0.998
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	0.998	0.997
440	0.998	0.995
420	0.997	0.994
400	0.996	0.993
390	0.995	0.990
380	0.992	0.983
370	0.985	0.970
360	0.971	0.943
350	0.945	0.893
340	0.902	0.813
330	0.834	0.696
320	0.737	0.544
310	0.615	0.378
300	0.476	0.226
290	0.331	0.110
280	0.191	0.037

着色度 Coloration Code	
λ 80 (λ 70) / λ 5	350/285
着色度 (内部透過率) Coloration of Internal Transmittance	
λ τ 80 / λ τ 5	339/282

分散式の定数 Constants of dispersion formula	
A_0	2.5020260
A_1	$-1.1082920 \times 10^{-2}$
A_2	1.1277200×10^{-2}
A_3	5.7154080×10^{-4}
A_4	$-5.5874550 \times 10^{-5}$
A_5	2.9052920×10^{-6}

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

部分分散 Partial dispersions	
$n_c - n_t$	0.007508
$n_d - n_c$	0.002705
$n_F - n_d$	0.006129
$n_g - n_F$	0.004732
$n_{c'} - n_t$	0.007940
$n_e - n_{c'}$	0.004382
$n_{F'} - n_e$	0.004518
$n_g - n_{F'}$	0.004234

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

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.8499	$P'_{c,t}$	0.8921
$P_{d,c}$	0.3062	$P'_{d,c}$	0.2554
$P_{e,d}$	0.2387	$P'_{e,d}$	0.2370
$P_{F,e}$	0.4551	$P'_{F,e}$	0.5076
$P_{g,F}$	0.5357	$P'_{g,F}$	0.4757
$P_{h,g}$	0.4410	$P'_{h,g}$	0.4378
$P_{i,h}$	0.7478	$P'_{i,h}$	0.7422

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

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

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.0091
$\Delta P_{c,A'}$	-0.0049
$\Delta P_{g,d}$	0.0104
$\Delta P_{g,F}$	0.0081
$\Delta P_{i,g}$	0.0406

比重 Specific Gravity	
d	3.14

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
Glass Type	HOYA	SCHOTT	OHARA	HIKARI	CDGM
	M-PCD51			(Q-PSKH1S)	
Code	592-670			593-679	
作成 201104					