

# M-FDS2

# 002-193

$n_d = 2.00178$   $\nu_d = 19.32$   $n_F - n_C = 0.051840$   
 $n_e = 2.01394$   $\nu_e = 19.17$   $n_{F'} - n_{C'} = 0.052898$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.95448
$n_s$	852.11	1.96440
$n_{A'}$	768.19	1.97198
$n_r$	706.52	1.97941
$n_c$	656.27	1.98721
$n_{c'}$	643.85	1.98946
$n_{633}$	632.80	1.99158
$n_D$	589.29	2.00134
$n_d$	587.56	2.00178
$n_e$	546.07	2.01394
$n_F$	486.13	2.03905
$n_{F'}$	479.99	2.04235
$n_g$	435.84	2.07247
$n_h$	404.66	2.10391
$n_i$	365.01	

化学的性質 Chemical Properties	
$D_W$	1
$D_A$	1
$T_{Blue}$	1
$D_{NaOH}$	2
$D_{STPP}$	1
$D_0$	2
$D_H$	1

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.999	0.997
1500	0.998	0.997
1400	0.999	0.998
1300	0.999	0.998
1200	0.999	0.998
1100	0.999	0.998
1060	0.999	0.999
1050	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.999
850	0.999	0.998
830	0.998	0.997
800	0.999	0.999
780	0.999	0.999
750	0.999	0.999
700	0.998	0.997
650	0.997	0.994
600	0.995	0.991
550	0.986	0.972
500	0.955	0.911
480	0.931	0.867
460	0.890	0.792
440	0.802	0.643
420	0.578	0.334
400	0.143	0.020
390		
380		
370		
360		
350		
340		
330		
320		
310		
300		
290		
280		

  

着色度 Coloration Code	
$\lambda$ 80 ( $\lambda$ 70) / $\lambda$ 5	(490) / 405

  

着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda$ $\tau$ 80 / $\lambda$ $\tau$ 5	462 / 403

分散式の定数 Constants of dispersion formula	
$A_0$	3.7715810
$A_1$	$-2.0445364 \times 10^{-2}$
$A_2$	$6.3942579 \times 10^{-2}$
$A_3$	$8.3545470 \times 10^{-3}$
$A_4$	$-8.2031984 \times 10^{-4}$
$A_5$	$1.0279507 \times 10^{-4}$

熱的性質 Thermal Properties	
$T_g$ (°C)	483
$T_s$ (°C)	527
$T_{10^{14.5}}$ (°C)	457
$T_{10^{13}}$ (°C)	477
$T_{10^{7.6}}$ (°C)	565
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	84
$\alpha_{100/300}$ ( $10^{-7}/K$ )	101
$\lambda$ [W/(m·K)]	0.780
$C_p$ [kJ/(kg·K)]	0.430

部分分散 Partial dispersions	
$n_c - n_t$	0.032729
$n_d - n_c$	0.014576
$n_F - n_d$	0.037264
$n_g - n_F$	0.033418
$n_{c'} - n_t$	0.034977
$n_e - n_{c'}$	0.024480
$n_{F'} - n_e$	0.028418
$n_g - n_{F'}$	0.030112

機械的性質 Mechanical Properties	
$H_K$	385 (4)
$F_A$	300
$E$ (GPa)	87
$G$ (GPa)	35.0
$\mu$	0.258
$\sigma_b$ (MPa)	59

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.6313	$P'_{c,t}$	0.6612
$P_{d,c}$	0.2812	$P'_{d,c}$	0.2331
$P_{e,d}$	0.2344	$P'_{e,d}$	0.2297
$P_{F,e}$	0.4844	$P'_{F,e}$	0.5372
$P_{g,F}$	0.6446	$P'_{g,F}$	0.5692
$P_{h,g}$	0.6066	$P'_{h,g}$	0.5944
$P_{i,h}$		$P'_{i,h}$	

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	5.4	2.8
-20/ 0	5.9	3.6
0/+20	6.3	4.3
+20/+40	6.8	5.0
+40/+60	7.2	5.7
+60/+80	7.6	6.3

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	1.92

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.0049
$\Delta P_{c,A'}$	-0.0066
$\Delta P_{g,d}$	0.0357
$\Delta P_{g,F}$	0.0312
$\Delta P_{i,g}$	

比重 Specific Gravity	
$d$	5.09

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	M-FDS2				
Code	002-193				
作成 201104					