

# TAFD55

# 001-291

$n_d = 2.00100$   $\nu_d = 29.13$   $n_F - n_C = 0.034358$   
 $n_e = 2.00912$   $\nu_e = 28.92$   $n_{F'} - n_{C'} = 0.034899$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.96756
$n_s$	852.11	1.97488
$n_{A'}$	768.19	1.98035
$n_r$	706.52	1.98561
$n_c$	656.27	1.99105
$n_{c'}$	643.85	1.99260
$n_{633}$	632.80	1.99406
$n_D$	589.29	2.00071
$n_d$	587.56	2.00100
$n_e$	546.07	2.00912
$n_F$	486.13	2.02540
$n_{F'}$	479.99	2.02750
$n_g$	435.84	2.04600
$n_h$	404.66	2.06423
$n_i$	365.01	

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

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.998	0.996
1500	0.998	0.995
1400	0.999	0.998
1300	0.999	0.998
1200	0.999	0.998
1100	0.999	0.998
1060	0.999	0.998
1050	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.999	0.998
830	0.999	0.998
800	0.999	0.998
780	0.999	0.998
750	0.999	0.997
700	0.999	0.999
650	0.999	0.999
600	0.999	0.998
550	0.998	0.996
500	0.990	0.981
480	0.984	0.968
460	0.975	0.950
440	0.962	0.925
420	0.933	0.870
400	0.866	0.749
390	0.795	0.633
380	0.668	0.446
370	0.437	0.191
360	0.143	0.021
350		
340		
330		
320		
310		
300		
290		
280		

分散式の定数 Constants of dispersion formula	
$A_0$	3.8317578
$A_1$	$-1.5266397 \times 10^{-2}$
$A_2$	$5.4573843 \times 10^{-2}$
$A_3$	$2.3109346 \times 10^{-3}$
$A_4$	$-4.4476201 \times 10^{-5}$
$A_5$	$1.6143887 \times 10^{-5}$

熱的性質 Thermal Properties	
$T_g$ (°C)	709
$T_s$ (°C)	752
$T_{10^{14.5}}$ (°C)	694
$T_{10^{13}}$ (°C)	705
$T_{10^{7.6}}$ (°C)	799
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	75
$\alpha_{100/300}$ ( $10^{-7}/K$ )	90
$\lambda$ [W/(m·K)]	0.817
$C_p$ [kJ/(kg·K)]	0.421

部分分散 Partial dispersions	
$n_c - n_t$	0.023484
$n_d - n_c$	0.009957
$n_F - n_d$	0.024401
$n_g - n_F$	0.020594
$n_{c'} - n_t$	0.025036
$n_e - n_{c'}$	0.016524
$n_{F'} - n_e$	0.018375
$n_g - n_{F'}$	0.018501

機械的性質 Mechanical Properties	
$H_K$	655 (7)
$F_A$	50
$E$ (GPa)	130
$G$ (GPa)	49.7
$\mu$	0.305
$\sigma_b$ (MPa)	106

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.6835	$P'_{c',t}$	0.7174
$P_{d,c}$	0.2898	$P'_{d,c'}$	0.2408
$P_{e,d}$	0.2363	$P'_{e,d}$	0.2326
$P_{F,e}$	0.4739	$P'_{F',e}$	0.5265
$P_{g,F}$	0.5994	$P'_{g,F'}$	0.5301
$P_{h,g}$	0.5306	$P'_{h,g}$	0.5224
$P_{i,h}$		$P'_{i,h}$	

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	3.6	0.9
-20/ 0	3.7	1.4
0/+20	3.8	1.9
+20/+40	4.0	2.3
+40/+60	4.3	2.7
+60/+80	4.5	3.1

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	0.82

比重 Specific Gravity	
$d$	5.12

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	(425)/365
着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	406/363

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0015
$\Delta P_{c,A'}$	-0.0008
$\Delta P_{e,d}$	0.0042
$\Delta P_{g,F}$	0.0036
$\Delta P_{i,g}$	

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	TAFD55		(S-LAH79)		
Code	001-291		003-283		
作成 201104					