

# TAF1

# 773-496

$n_d = 1.77250$   $\nu_d = 49.62$   $n_F - n_C = 0.015567$   
 $n_e = 1.77621$   $\nu_e = 49.39$   $n_{F'} - n_{C'} = 0.015716$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.75536
$n_s$	852.11	1.75958
$n_{A'}$	768.19	1.76247
$n_r$	706.52	1.76514
$n_c$	656.27	1.76780
$n_{c'}$	643.85	1.76854
$n_{633}$	632.80	1.76924
$n_D$	589.29	1.77236
$n_d$	587.56	1.77250
$n_e$	546.07	1.77621
$n_F$	486.13	1.78336
$n_{F'}$	479.99	1.78426
$n_g$	435.84	1.79193
$n_h$	404.66	1.79909
$n_i$	365.01	1.81143

化学的性質 Chemical Properties	
$D_W$	1
$D_A$	3
$T_{Blue}$	2
$D_{NaOH}$	1
$D_{STPP}$	1
$D_0$	2
$D_H$	

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.996	0.992
1500	0.996	0.993
1400	0.999	0.999
1300	0.999	0.999
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	0.999	0.998
800	0.998	0.996
780	0.999	0.997
750	0.999	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	0.999
460	0.998	0.995
440	0.997	0.994
420	0.995	0.989
400	0.991	0.983
390	0.989	0.977
380	0.983	0.967
370	0.967	0.934
360	0.949	0.900
350	0.914	0.835
340	0.858	0.736
330	0.777	0.604
320	0.655	0.429
310	0.434	0.189
300	0.165	0.027
290		
280		

分散式の定数 Constants of dispersion formula	
$A_0$	3.0736378
$A_1$	$-1.5501284 \times 10^{-2}$
$A_2$	$2.3627699 \times 10^{-2}$
$A_3$	$6.6300852 \times 10^{-4}$
$A_4$	$-2.8353438 \times 10^{-5}$
$A_5$	$2.2090799 \times 10^{-6}$

熱的性質 Thermal Properties	
$T_g$ (°C)	655
$T_s$ (°C)	690
$T_{10^{14.5}}$ (°C)	633
$T_{10^{13}}$ (°C)	648
$T_{10^{7.6}}$ (°C)	719
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	59
$\alpha_{100/300}$ ( $10^{-7}/K$ )	73
$\lambda$ [W/(m·K)]	0.913
$C_p$ [kJ/(kg·K)]	0.498

部分分散 Partial dispersions	
$n_c - n_t$	0.012438
$n_d - n_c$	0.004704
$n_F - n_d$	0.010863
$n_g - n_F$	0.008566
$n_{c'} - n_t$	0.013184
$n_e - n_{c'}$	0.007666
$n_{F'} - n_e$	0.008050
$n_g - n_{F'}$	0.007671

機械的性質 Mechanical Properties	
$H_K$	750 (7)
$F_A$	60
$E$ (GPa)	129
$G$ (GPa)	50.4
$\mu$	0.277
$\sigma_b$ (MPa)	

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7990	$P'_{c,t}$	0.8389
$P_{d,c}$	0.3022	$P'_{d,c}$	0.2518
$P_{e,d}$	0.2382	$P'_{e,d}$	0.2359
$P_{F,e}$	0.4596	$P'_{F,e}$	0.5122
$P_{g,F}$	0.5503	$P'_{g,F}$	0.4881
$P_{h,g}$	0.4601	$P'_{h,g}$	0.4558
$P_{i,h}$	0.7927	$P'_{i,h}$	0.7852

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	4.8	2.4
-20/ 0	4.7	2.7
0/+20	4.8	3.0
+20/+40	4.9	3.3
+40/+60	5.0	3.7
+60/+80	5.2	4.0

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0212
$\Delta P_{c,A'}$	0.0049
$\Delta P_{g,d}$	-0.0106
$\Delta P_{g,F}$	-0.0086
$\Delta P_{i,g}$	-0.0492

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	1.49

比重 Specific Gravity	
$d$	4.28

着色度 Coloration Code	
$\lambda 80 (\lambda 70) / \lambda 5$	370/305
着色度 (内部透過率) Coloration of Internal Transmittance	
$\lambda \tau 80 / \lambda \tau 5$	346/302

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	TAF1	N-LAF34	S-LAH66	E-LASF016	H-LAF50A
Code	773-496	773-496	773-496	772-496	773-496
作成 201104					