

# LAF3

# 717-480

$n_d = 1.71700$   $\nu_d = 47.98$   $n_F - n_C = 0.014944$   
 $n_e = 1.72056$   $\nu_e = 47.73$   $n_{F'} - n_{C'} = 0.015098$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.70113
$n_s$	852.11	1.70484
$n_{A'}$	768.19	1.70750
$n_r$	706.52	1.70999
$n_c$	656.27	1.71251
$n_{c'}$	643.85	1.71322
$n_{633}$	632.80	1.71389
$n_D$	589.29	1.71687
$n_d$	587.56	1.71700
$n_e$	546.07	1.72056
$n_F$	486.13	1.72745
$n_{F'}$	479.99	1.72832
$n_g$	435.84	1.73576
$n_h$	404.66	1.74274
$n_i$	365.01	1.75485

分散式の定数 Constants of dispersion formula	
$A_0$	2.8789799
$A_1$	$-8.7292370 \times 10^{-3}$
$A_2$	$2.4425656 \times 10^{-2}$
$A_3$	$4.5491773 \times 10^{-5}$
$A_4$	$4.2802928 \times 10^{-5}$
$A_5$	$-7.2834306 \times 10^{-7}$

部分分散 Partial dispersions	
$n_c - n_t$	0.011380
$n_d - n_c$	0.004490
$n_F - n_d$	0.010454
$n_g - n_F$	0.008303
$n_{c'} - n_t$	0.012090
$n_e - n_{c'}$	0.007338
$n_{F'} - n_e$	0.007760
$n_g - n_{F'}$	0.007439

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7615	$P'_{c,t}$	0.8008
$P_{d,c}$	0.3005	$P'_{d,c}$	0.2504
$P_{e,d}$	0.2381	$P'_{e,d}$	0.2357
$P_{F,e}$	0.4615	$P'_{F,e}$	0.5140
$P_{g,F}$	0.5556	$P'_{g,F}$	0.4927
$P_{h,g}$	0.4673	$P'_{h,g}$	0.4626
$P_{i,h}$	0.8102	$P'_{i,h}$	0.8020

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.0086
$\Delta P_{c,A'}$	0.0002
$\Delta P_{g,d}$	-0.0073
$\Delta P_{g,F}$	-0.0063
$\Delta P_{i,g}$	-0.0391

化学的性質 Chemical Properties	
$D_W$	1
$D_A$	4
$T_{Blue}$	2
$D_{NaOH}$	1
$D_{STPP}$	2
$D_0$	3
$D_H$	

熱的性質 Thermal Properties	
$T_g$ (°C)	607
$T_s$ (°C)	665
$T_{10^{14.5}}$ (°C)	589
$T_{10^{13}}$ (°C)	603
$T_{10^{7.6}}$ (°C)	717
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	80
$\alpha_{100/300}$ ( $10^{-7}/K$ )	93
$\lambda$ [W/(m·K)]	0.687
$C_p$ [kJ/(kg·K)]	0.472

機械的性質 Mechanical Properties	
$H_K$	555 (6)
$F_A$	180
$E$ (GPa)	94
$G$ (GPa)	36.6
$\mu$	0.288
$\sigma_b$ (MPa)	

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	1.6	-0.7
-20/0	1.5	-0.5
0/+20	1.4	-0.3
+20/+40	1.4	-0.1
+40/+60	1.4	0.1
+60/+80	1.5	0.3

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	2.71

比重 Specific Gravity	
$d$	4.20

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	LAF3	N-LAF3	S-LAM 3		
Code	717-480	717-480	717-479		
作成 201104					

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.998	0.995
1500	0.998	0.995
1400	0.998	0.996
1300	0.999	0.997
1200	0.999	0.998
1100	0.999	0.997
1060	0.999	0.997
1050	0.999	0.997
1000	0.998	0.997
950	0.999	0.997
900	0.998	0.997
850	0.999	0.997
830	0.999	0.997
800	0.998	0.996
780	0.999	0.997
750	0.999	0.997
700	0.999	0.999
650	0.999	0.997
600	0.999	0.997
550	0.999	0.997
500	0.999	0.997
480	0.998	0.996
460	0.996	0.991
440	0.994	0.987
420	0.993	0.986
400	0.988	0.975
390	0.982	0.965
380	0.971	0.943
370	0.950	0.900
360	0.910	0.820
350	0.830	0.680
340	0.680	0.460
330	0.430	0.190
320	0.160	0.020
310		
300		
290		
280		
着色度 Coloration Code		
$\lambda 80(\lambda 70)/\lambda 5$	370/320	
着色度 (内部透過率) Coloration of Internal Transmittance		
$\lambda \tau 80/\lambda \tau 5$		