

# LAC12

# 678-555

$n_d = 1.67790$   $\nu_d = 55.52$   $n_F - n_C = 0.012210$   
 $n_e = 1.68081$   $\nu_e = 55.27$   $n_{F'} - n_{C'} = 0.012319$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.66439
$n_s$	852.11	1.66771
$n_{A'}$	768.19	1.66999
$n_r$	706.52	1.67210
$n_c$	656.27	1.67420
$n_{c'}$	643.85	1.67479
$n_{633}$	632.80	1.67534
$n_D$	589.29	1.67779
$n_d$	587.56	1.67790
$n_e$	546.07	1.68081
$n_F$	486.13	1.68641
$n_{F'}$	479.99	1.68710
$n_g$	435.84	1.69306
$n_h$	404.66	1.69860
$n_i$	365.01	1.70808

分散式の定数 Constants of dispersion formula	
$A_0$	2.7634844
$A_1$	$-1.1068339 \times 10^{-2}$
$A_2$	$1.8246442 \times 10^{-2}$
$A_3$	$3.7697356 \times 10^{-4}$
$A_4$	$-1.7788655 \times 10^{-5}$
$A_5$	$1.5314262 \times 10^{-6}$

部分分散 Partial dispersions	
$n_C - n_t$	0.009808
$n_d - n_C$	0.003705
$n_F - n_d$	0.008505
$n_g - n_F$	0.006657
$n_{C'} - n_t$	0.010396
$n_e - n_{C'}$	0.006029
$n_{F'} - n_e$	0.006290
$n_g - n_{F'}$	0.005960

部分分散比 Partial dispersion rates			
$P_{C,t}$	0.8033	$P'_{C,t}$	0.8439
$P_{d,C}$	0.3034	$P'_{d,C}$	0.2530
$P_{e,d}$	0.2385	$P'_{e,d}$	0.2364
$P_{F,e}$	0.4581	$P'_{F,e}$	0.5106
$P_{g,F}$	0.5452	$P'_{g,F}$	0.4838
$P_{h,g}$	0.4532	$P'_{h,g}$	0.4492
$P_{i,h}$	0.7766	$P'_{i,h}$	0.7697

異常分散性 Anomalous dispersions	
$\Delta P_{C,t}$	-0.0020
$\Delta P_{C,A'}$	0.0000
$\Delta P_{g,d}$	-0.0035
$\Delta P_{g,F}$	-0.0031
$\Delta P_{i,g}$	-0.0201

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

熱的性質 Thermal Properties	
$T_g$ (°C)	637
$T_s$ (°C)	677
$T_{10^{14.5}}$ (°C)	613
$T_{10^{13}}$ (°C)	631
$T_{10^{7.6}}$ (°C)	715
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	77
$\alpha_{100/300}$ ( $10^{-7}/K$ )	90
$\lambda$ [W/(m·K)]	0.832
$C_p$ [kJ/(kg·K)]	0.582

機械的性質 Mechanical Properties	
$H_K$	590 (6)
$F_A$	150
$E$ (GPa)	94
$G$ (GPa)	36.4
$\mu$	0.292
$\sigma_b$ (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	1.0	-1.3
-20/ 0	0.8	-1.1
0/+20	0.9	-0.8
+20/+40	0.9	-0.6
+40/+60	0.9	-0.4
+60/+80	0.9	-0.2

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	1.60

比重 Specific Gravity	
$d$	3.80

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	LAC12	N-LAK12	S-LAL12		
Code	678-555	678-552	678-553		
作成 201104					

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.996	0.993
1500	0.997	0.993
1400	0.997	0.994
1300	0.999	0.998
1200	0.999	0.998
1100	0.999	0.998
1060	0.999	0.998
1050	0.999	0.997
1000	0.998	0.997
950	0.999	0.997
900	0.999	0.997
850	0.999	0.998
830	0.999	0.998
800	0.999	0.998
780	0.999	0.998
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	0.997	0.994
460	0.997	0.994
440	0.994	0.989
420	0.993	0.986
400	0.990	0.980
390	0.975	0.951
380	0.958	0.917
370	0.930	0.860
360	0.870	0.760
350	0.770	0.600
340	0.640	0.410
330	0.470	0.220
320	0.300	0.090
310	0.170	0.030
300	0.090	0.010
290		
280		

着色度 Coloration Code	
$\lambda 80(\lambda 70)/\lambda 5$	370/310

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