

# LAC10

# 720-503

$n_d = 1.72000$   $\nu_d = 50.34$   $n_F - n_C = 0.014302$   
 $n_e = 1.72341$   $\nu_e = 50.10$   $n_{F'} - n_{C'} = 0.014439$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.70442
$n_s$	852.11	1.70818
$n_{A'}$	768.19	1.71081
$n_r$	706.52	1.71324
$n_c$	656.27	1.71568
$n_{c'}$	643.85	1.71636
$n_{633}$	632.80	1.71700
$n_D$	589.29	1.71987
$n_d$	587.56	1.72000
$n_e$	546.07	1.72341
$n_F$	486.13	1.72998
$n_{F'}$	479.99	1.73080
$n_g$	435.84	1.73785
$n_h$	404.66	1.74443
$n_i$	365.01	1.75579

分散式の定数 Constants of dispersion formula	
$A_0$	2.8951998
$A_1$	$-1.1701218 \times 10^{-2}$
$A_2$	$2.2126485 \times 10^{-2}$
$A_3$	$3.8494791 \times 10^{-4}$
$A_4$	$-7.9808302 \times 10^{-6}$
$A_5$	$1.5035116 \times 10^{-6}$

部分分散 Partial dispersions	
$n_c - n_t$	0.011258
$n_d - n_c$	0.004320
$n_F - n_d$	0.009982
$n_g - n_F$	0.007868
$n_{c'} - n_t$	0.011943
$n_e - n_{c'}$	0.007043
$n_{F'} - n_e$	0.007396
$n_g - n_{F'}$	0.007046

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7872	$P'_{c,t}$	0.8271
$P_{d,c}$	0.3021	$P'_{d,c}$	0.2517
$P_{e,d}$	0.2383	$P'_{e,d}$	0.2360
$P_{F,e}$	0.4597	$P'_{F,e}$	0.5122
$P_{g,F}$	0.5501	$P'_{g,F}$	0.4880
$P_{h,g}$	0.4602	$P'_{h,g}$	0.4558
$P_{i,h}$	0.7943	$P'_{i,h}$	0.7868

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	0.0060
$\Delta P_{c,A'}$	0.0025
$\Delta P_{g,d}$	-0.0089
$\Delta P_{g,F}$	-0.0075
$\Delta P_{i,g}$	-0.0412

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

熱的性質 Thermal Properties	
$T_g$ (°C)	617
$T_s$ (°C)	655
$T_{10^{14.5}}$ (°C)	592
$T_{10^{13}}$ (°C)	612
$T_{10^{7.6}}$ (°C)	692
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	74
$\alpha_{100/300}$ ( $10^{-7}/K$ )	91
$\lambda$ [W/(m·K)]	0.834
$C_p$ [kJ/(kg·K)]	0.588

機械的性質 Mechanical Properties	
$H_K$	650 (7)
$F_A$	110
$E$ (GPa)	100
$G$ (GPa)	39.3
$\mu$	0.276
$\sigma_b$ (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	3.0	0.7
-20/ 0	2.9	0.9
0/+20	2.8	1.1
+20/+40	2.9	1.4
+40/+60	3.0	1.7
+60/+80	3.1	2.0

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	1.87

比重 Specific Gravity	
$d$	3.87

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	LAC10	N-LAK10	S-LAL10		
Code	720-503	720-506	720-502		
作成 201104					

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.998	0.997
1500	0.998	0.997
1400	0.999	0.998
1300	0.999	0.999
1200	0.999	0.999
1100	0.999	0.999
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	0.999
830	0.999	0.999
800	0.999	0.999
780	0.999	0.999
750	0.999	0.998
700	0.998	0.996
650	0.998	0.996
600	0.998	0.996
550	0.998	0.996
500	0.998	0.996
480	0.998	0.996
460	0.997	0.994
440	0.997	0.994
420	0.996	0.991
400	0.993	0.985
390	0.989	0.979
380	0.985	0.970
370	0.975	0.950
360	0.958	0.917
350	0.926	0.858
340	0.879	0.772
330	0.807	0.650
320	0.690	0.476
310	0.492	0.242
300	0.214	0.046
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	
$\lambda \tau 80/\lambda \tau 5$	