

# BACD18

## 639-555

$n_d = 1.63854$   $\nu_d = 55.45$   $n_F - n_C = 0.011516$   
 $n_e = 1.64129$   $\nu_e = 55.18$   $n_{F'} - n_{C'} = 0.011621$

屈折率 Refractive Index		
	$\lambda$ (nm)	
$n_t$	1013.98	1.62585
$n_s$	852.11	1.62895
$n_{A'}$	768.19	1.63110
$n_r$	706.52	1.63308
$n_c$	656.27	1.63505
$n_{c'}$	643.85	1.63561
$n_{633}$	632.80	1.63613
$n_D$	589.29	1.63844
$n_d$	587.56	1.63854
$n_e$	546.07	1.64129
$n_F$	486.13	1.64657
$n_{F'}$	479.99	1.64723
$n_g$	435.84	1.65287
$n_h$	404.66	1.65813
$n_i$	365.01	1.66715

分散式の定数 Constants of dispersion formula	
$A_0$	2.6365277
$A_1$	$-9.7558464 \times 10^{-3}$
$A_2$	$1.7143665 \times 10^{-2}$
$A_3$	$2.2592497 \times 10^{-4}$
$A_4$	$3.0855342 \times 10^{-6}$
$A_5$	$4.5831917 \times 10^{-7}$

部分分散 Partial dispersions	
$n_c - n_t$	0.009203
$n_d - n_c$	0.003489
$n_F - n_d$	0.008027
$n_g - n_F$	0.006303
$n_{c'} - n_t$	0.009757
$n_e - n_{c'}$	0.005680
$n_{F'} - n_e$	0.005941
$n_g - n_{F'}$	0.005644

部分分散比 Partial dispersion rates			
$P_{c,t}$	0.7991	$P'_{c,t}$	0.8396
$P_{d,c}$	0.3030	$P'_{d,c}$	0.2526
$P_{e,d}$	0.2384	$P'_{e,d}$	0.2362
$P_{F,e}$	0.4587	$P'_{F,e}$	0.5112
$P_{g,F}$	0.5473	$P'_{g,F}$	0.4857
$P_{h,g}$	0.4564	$P'_{h,g}$	0.4523
$P_{i,h}$	0.7834	$P'_{i,h}$	0.7764

異常分散性 Anomalous dispersions	
$\Delta P_{c,t}$	-0.0058
$\Delta P_{c,A'}$	-0.0009
$\Delta P_{g,d}$	-0.0010
$\Delta P_{g,F}$	-0.0011
$\Delta P_{i,g}$	-0.0107

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

熱的性質 Thermal Properties	
$T_g$ (°C)	620
$T_s$ (°C)	676
$T_{10^{14.5}}$ (°C)	595
$T_{10^{13}}$ (°C)	613
$T_{10^{7.6}}$ (°C)	746
$\alpha_{-30/+70}$ ( $10^{-7}/K$ )	69
$\alpha_{100/300}$ ( $10^{-7}/K$ )	81
$\lambda$ [W/(m·K)]	0.516
$C_p$ [kJ/(kg·K)]	0.794

機械的性質 Mechanical Properties	
$H_K$	590 (6)
$F_A$	150
$E$ (GPa)	82
$G$ (GPa)	31.9
$\mu$	0.281
$\sigma_b$ (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	2.3	0.1
-20/ 0	2.3	0.4
0/+20	2.4	0.7
+20/+40	2.4	1.0
+40/+60	2.6	1.3
+60/+80	2.7	1.5

光弾性定数 Photoelastic Constant	
$B$ ( $10^{-12}/Pa$ )	1.77

比重 Specific Gravity	
$d$	3.66

備考 Remarks					
硝種対照表 Glass Cross Reference Index					
	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	BACD18	N-SK18	S-BSM18	E-SK18	H-ZK11
Code	639-555	639-554	639-554	639-555	639-555
作成 201104					

内部透過率 Internal Transmittance		
$\lambda$ (nm)	$\tau$ 5mm	$\tau$ 10mm
1550	0.996	0.992
1500	0.996	0.992
1400	0.995	0.990
1300	0.998	0.997
1200	0.998	0.997
1100	0.998	0.996
1060	0.998	0.996
1050	0.998	0.996
1000	0.998	0.996
950	0.998	0.997
900	0.998	0.997
850	0.999	0.997
830	0.999	0.997
800	0.999	0.998
780	0.999	0.998
750	0.999	0.998
700	0.999	0.999
650	0.998	0.997
600	0.999	0.998
550	0.999	0.999
500	0.998	0.996
480	0.997	0.994
460	0.996	0.992
440	0.995	0.990
420	0.995	0.991
400	0.994	0.987
390	0.991	0.982
380	0.986	0.971
370	0.974	0.949
360	0.950	0.902
350	0.894	0.799
340	0.788	0.621
330	0.580	0.336
320	0.281	0.079
310		
300		
290		
280		
着色度 Coloration Code		
$\lambda 80 (\lambda 70) / \lambda 5$	360/320	
着色度 (内部透過率) Coloration of Internal Transmittance		
$\lambda \tau 80 / \lambda \tau 5$	350/318	