ガラスレンズ用プレス品硝種　Glass Lens Pressed Blanks
ガラス研磨レンズ用硝種　Glass Polished Lens

H-SERIES

FCD1

497-816

$n_d = 1.49700$　$\nu_d = 81.61$　$n_F - n_C = 0.006090$
$n_e = 1.49845$　$\nu_e = 81.19$　$n_{F'} - n_{C'} = 0.006139$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.49008
n_s	852.11	1.49182
$n_{A'}$	768.19	1.49300
n_r	706.52	1.49408
n_C	656.27	1.49514
$n_{C'}$	643.85	1.49543
n_{633}	632.80	1.49571
n_D	589.29	1.49694
n_d	587.56	1.49700
n_e	546.07	1.49845
n_F	486.13	1.50123
$n_{F'}$	479.99	1.50157
n_g	435.84	1.50451
n_h	404.66	1.50721
n_i	365.01	1.51175

分散式の定数 Constants of dispersion formula	
A_0	2.2181132
A_1	$-5.7994270 \times 10^{-3}$
A_2	8.3470679×10^{-3}
A_3	6.5046523×10^{-5}
A_4	8.5142186×10^{-6}
A_5	$-5.8852269 \times 10^{-7}$

部分分散 Partial dispersions	
$n_C - n_t$	0.005058
$n_d - n_C$	0.001860
$n_F - n_d$	0.004230
$n_g - n_F$	0.003281
$n_{C'} - n_t$	0.005354
$n_e - n_{C'}$	0.003017
$n_{F'} - n_e$	0.003122
$n_g - n_{F'}$	0.002936

部分分散比 Partial dispersion rates			
P_{C_t}	0.8305	$P'_{C'\_t}$	0.8721
P_{d_C}	0.3054	$P'_{d\_C'}$	0.2548
P_{e_d}	0.2386	P'_{e_d}	0.2367
P_{F_e}	0.4560	$P'_{F'\_e}$	0.5086
P_{g_F}	0.5388	$P'_{g\_F'}$	0.4783
P_{h_g}	0.4437	P'_{h_g}	0.4401
P_{i_h}	0.7453	P'_{i_h}	0.7394

異常分散性 Anomalous dispersions	
ΔP_{C_t}	-0.0966
$\Delta P_{C\_A'}$	-0.0255
ΔP_{g_d}	0.0476
ΔP_{g_F}	0.0375
ΔP_{i_g}	0.1700

化学的性質 Chemical Properties	
D_W	2
D_A	3
T_{Blue}	4
D_{NaOH}	5
D_{STPP}	5
D_0	5
D_H	

熱的性質 Thermal Properties	
T_g (℃)	457
T_s (℃)	490
$T_{10^{14.5}}$ (℃)	439
$T_{10^{13}}$ (℃)	450
$T_{10^{7.6}}$ (℃)	560
$\alpha_{-30/+70℃}$ (10^{-7}/K)	132
$\alpha_{100/300℃}$ (10^{-7}/K)	155
λ [W/(m·K)]	0.837
C_P [kJ/(kg·K)]	0.636

機械的性質 Mechanical Properties	
H_K	345(3)
F_A	410
E (GPa)	80
G (GPa)	31.1
μ	0.280
σ_b (MPa)	

屈折率の温度係数 (×10^{-6}/K) Thermal coefficient of refractive indices		
(℃)	dn/dT (rel.)	dn/dT (abs.)
-40/-20	-5.5	-7.5
-20/ 0	-5.9	-7.6
0/+20	-6.2	-7.7
+20/+40	-6.4	-7.7
+40/+60	-6.6	-7.7
+60/+80	-6.7	-7.7

光弾性定数 Photoelastic Constant	
B (10^{-12}/Pa)	0.74

比重 Specific Gravity	
d	3.70

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.999	0.999
1500	0.999	0.999
1400	0.999	0.999
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	0.999
700	0.999	0.999
650	0.999	0.998
600	0.999	0.999
550	0.999	0.999
500	0.999	0.999
480	0.999	0.999
460	0.999	0.997
440	0.998	0.997
420	0.999	0.997
400	0.997	0.995
390	0.998	0.996
380	0.997	0.995
370	0.995	0.990
360	0.986	0.972
350	0.969	0.939
340	0.937	0.878
330	0.872	0.761
320	0.765	0.586
310	0.613	0.376
300	0.436	0.190
290	0.277	0.077
280	0.164	0.027

着色度 Coloration Code	
λ80(λ70)/λ5	340/285

着色度(内部透過率) Coloration of Internal Transmittance	
λτ80/λτ5	333/286

備考 Remarks

硝種対照表　Glass Cross Reference Index

	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	FCD1	N-PK52A	S-FPL51	E-FK01	H-FK61
Code	497-816	497-816	497-816	497-816	497-816

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