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

S-SERIES

PCD4

618-634

$n_d = 1.61800$　$\nu_d = 63.40$　$n_F - n_C = 0.009748$
$n_e = 1.62032$　$\nu_e = 63.12$　$n_{F'} - n_{C'} = 0.009828$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.60697
n_s	852.11	1.60976
$n_{A'}$	768.19	1.61163
n_r	706.52	1.61334
n_C	656.27	1.61503
$n_{C'}$	643.85	1.61550
n_{633}	632.80	1.61594
n_D	589.29	1.61791
n_d	587.56	1.61800
n_e	546.07	1.62032
n_F	486.13	1.62478
$n_{F'}$	479.99	1.62533
n_g	435.84	1.63004
n_h	404.66	1.63439
n_i	365.01	1.64180

分散式の定数 Constants of dispersion formula	
A_0	2.5807045
A_1	$-1.0957538 \times 10^{-2}$
A_2	1.2689430×10^{-2}
A_3	6.6387812×10^{-4}
A_4	$-6.4849664 \times 10^{-5}$
A_5	3.4787863×10^{-6}

部分分散 Partial dispersions	
$n_C - n_t$	0.008059
$n_d - n_C$	0.002970
$n_F - n_d$	0.006778
$n_g - n_F$	0.005265
$n_{C'} - n_t$	0.008532
$n_e - n_{C'}$	0.004823
$n_{F'} - n_e$	0.005005
$n_g - n_{F'}$	0.004712

部分分散比 Partial dispersion rates			
P_{C_t}	0.8267	$P'_{C'\_t}$	0.8681
P_{d_C}	0.3047	$P'_{d\_C'}$	0.2541
P_{e_d}	0.2386	P'_{e_d}	0.2367
P_{F_e}	0.4567	$P'_{F'\_e}$	0.5093
P_{g_F}	0.5401	$P'_{g\_F'}$	0.4794
P_{h_g}	0.4460	P'_{h_g}	0.4424
P_{i_h}	0.7602	P'_{i_h}	0.7540

異常分散性 Anomalous dispersions	
ΔP_{C_t}	-0.0154
$\Delta P_{C\_A'}$	-0.0055
ΔP_{g_d}	0.0082
ΔP_{g_F}	0.0060
ΔP_{i_g}	0.0260

化学的性質 Chemical Properties	
D_W	1
D_A	5
T_{Blue}	3
D_{NaOH}	4
D_{STPP}	4
D_0	3
D_H	

熱的性質 Thermal Properties	
T_g (℃)	604
T_s (℃)	645
$T_{10^{14.5}}$ (℃)	574
$T_{10^{13}}$ (℃)	595
$T_{10^{7.6}}$ (℃)	690
$\alpha_{-30/+70℃}$ (10^{-7}/K)	92
$\alpha_{100/300℃}$ (10^{-7}/K)	111
λ [W/(m·K)]	0.678
C_P [kJ/(kg·K)]	0.557

機械的性質 Mechanical Properties	
H_K	445(4)
F_A	310
E (GPa)	73
G (GPa)	28.1
μ	0.293
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	-2.4	-4.6
-20/ 0	-2.6	-4.4
0/+20	-2.6	-4.2
+20/+40	-2.6	-4.0
+40/+60	-2.6	-3.8
+60/+80	-2.5	-3.6

光弾性定数 Photoelastic Constant	
B (10^{-12}/Pa)	1.31

比重 Specific Gravity	
d	3.52

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.996	0.993
1500	0.996	0.992
1400	0.997	0.994
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	0.998
780	0.999	0.999
750	0.999	0.999
700	0.999	0.998
650	0.999	0.999
600	0.999	0.999
550	0.999	0.999
500	0.999	0.999
480	0.999	0.997
460	0.998	0.996
440	0.997	0.994
420	0.996	0.992
400	0.996	0.991
390	0.993	0.985
380	0.988	0.975
370	0.977	0.954
360	0.955	0.911
350	0.926	0.858
340	0.875	0.765
330	0.801	0.642
320	0.706	0.498
310	0.596	0.356
300	0.485	0.235
290	0.369	0.136
280	0.234	0.055

着色度 Coloration Code	
λ80(λ70)/λ5	355/280

着色度 (内部透過率) Coloration of Internal Transmittance	
λτ80/λτ5	344/279

備考 Remarks

硝種対照表　Glass Cross Reference Index

	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	PCD4	N-PSK53A	S-PHM52	E-PSK02	
Code	618-634	618-634	618-634	618-634	

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