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

推奨硝種
Recommended Glass Type

TAC6L

755-523

$n_d = 1.75500$ $\nu_d = 52.32$ (52.318) $n_F - n_C = 0.014431$
$n_e = 1.75844$ $\nu_e = 52.09$ (52.087) $n_{F'} - n_{C'} = 0.014561$

屈 折 率 Refractive Index

	λ (nm)	
$n_{1529.6}$	1529.60	1.72987
$n_{1128.64}$	1128.64	1.73669
n_t	1013.98	1.73896
n_s	852.11	1.74293
$n_{A'}$	768.195	1.74565
n_r	706.519	1.74814
n_C	656.273	1.75063
$n_{C'}$	643.847	1.75132
n_{633}	632.8	1.75197
n_D	589.294	1.75487
n_d	587.562	1.75500
n_e	546.074	1.75844
n_F	486.133	1.76506
$n_{F'}$	479.991	1.76588
n_g	435.834	1.77296
n_h	404.656	1.77954
n_i	365.015	1.79081

分 散 式 の 定 数 Constants of dispersion formula

A_0	3.0165377
A_1	$-1.4443510 \times 10^{-2}$
A_2	2.2581959×10^{-2}
A_3	3.4150904×10^{-4}
A_4	7.9160305×10^{-6}
A_5	1.0328888×10^{-7}

部 分 分 散 Partial dispersions

$n_C - n_t$	0.011666
$n_d - n_C$	0.004375
$n_F - n_d$	0.010056
$n_g - n_F$	0.007900
$n_{C'} - n_t$	0.012362
$n_e - n_{C'}$	0.007118
$n_{F'} - n_e$	0.007443
$n_g - n_{F'}$	0.007074

部分分散比 Partial dispersion rates

P_{C_t}	0.8084	$P'_{C'_t}$	0.8490
P_{d_C}	0.3032	$P'_{d_C'}$	0.2527
P_{e_d}	0.2383	P'_{e_d}	0.2362
P_{F_e}	0.4585	$P'_{F'_e}$	0.5112
P_{g_F}	0.5474	$P'_{g_F'}$	0.4858
P_{h_g}	0.4562	P'_{h_g}	0.4521
P_{i_h}	0.7812	P'_{i_h}	0.7743

異常分散性 Anomalous dispersions

ΔP_{C_t}	0.0181
$\Delta P_{C_A'}$	0.0043
ΔP_{g_d}	−0.0084
ΔP_{g_F}	−0.0068
ΔP_{i_g}	−0.0406

光弾性定数 Photoelastic Constant

B (10^{-12}/Pa)	1.38

比 重 Specific Gravity

d	4.19

化 学 的 性 質 Chemical Properties

D_W	1
D_A	4
T_{Blue}	3
D_{NaOH}	1
D_{STPP}	2
D_O	3
D_H	1

熱 的 性 質 Thermal Properties

T_g (℃)	685
T_s (℃)	713
$T_{10^{14.5}}$ (℃)	665
$T_{10^{13}}$ (℃)	679
$T_{10^{7.6}}$ (℃)	739
$\alpha_{-30/+70℃}$ (10^{-7}/℃)	58
$\alpha_{100/300℃}$ (10^{-7}/℃)	76
λ [W/(m·K)]	0.824
C_p [kJ/(kg·K)]	0.526

機 械 的 性 質 Mechanical Properties

H_K	735(7)
F_A	60
E (GPa)	119
G (GPa)	45.8
μ	0.294
σ_b (MPa)	

内部透過率 Internal Transmittance

λ (nm)	τ 2mm	τ 5mm	τ 10mm
2500	0.874	0.715	0.511
2400	0.917	0.804	0.647
2200	0.978	0.946	0.894
2000	0.992	0.981	0.962
1800	0.997	0.993	0.987
1600	0.999	0.998	0.995
1550	0.999	0.998	0.996
1500	0.999	0.998	0.995
1400	0.999	0.998	0.997
1300	0.999	0.999	0.999
1200	0.999	0.999	0.999
1100	0.999	0.999	0.999
1060	0.999	0.999	0.999
1050	0.999	0.999	0.999
1000	0.999	0.999	0.998
950	0.999	0.999	0.998
900	0.999	0.999	0.998
850	0.999	0.999	0.998
830	0.999	0.999	0.998
800	0.999	0.999	0.999
780	0.999	0.999	0.999
750	0.999	0.999	0.999
700	0.999	0.999	0.999
650	0.999	0.999	0.998
600	0.999	0.998	0.995
550	0.998	0.996	0.991
500	0.999	0.998	0.997
480	0.999	0.998	0.995
460	0.999	0.997	0.993
440	0.998	0.996	0.991
420	0.998	0.994	0.988
400	0.997	0.991	0.983
390	0.996	0.989	0.978
380	0.994	0.985	0.970
370	0.991	0.978	0.956
360	0.986	0.966	0.933
350	0.979	0.948	0.898
340	0.967	0.920	0.846
330	0.951	0.881	0.776
320	0.929	0.831	0.691
310	0.899	0.767	0.589
300	0.862	0.689	0.475
290	0.810	0.591	0.350
280	0.730	0.455	0.207

着 色 度 Coloration Code

$\lambda_{80}(\lambda_{70})/\lambda_5$	360/270

着 色 度 (内部透過率) Coloration of Internal Transmittance

$\lambda_{\tau 80}/\lambda_{\tau 5}$	333/266

CCI Color Contribution Index

CCI(G)	0.35
CCI(R)	0.38

屈折率の温度係数 dn/dT (×10^{-6}/℃) Temperature Coefficient of Refractive Index
アッベ数の温度係数 dν/dT (×10^{-3}/℃) Temperature Coefficient of Abbe-number

	(℃)	dn/dT										dν/dT	
		n_h	n_g	$n_{F'}$	n_F	n_e	n_d	n_{633}	$n_{C'}$	n_C	n_r	ν_e	ν_d
		404.66	435.84	479.99	486.13	546.07	587.56	632.80	643.85	656.27	706.52	546.07	587.56
dn/dT & dν/dT (rel.)	-40 / -20	4.9	4.6	4.2	4.1	3.7	3.6	3.4	3.3	3.3	3.2	-2.7	-2.7
	-20 / 0	4.9	4.6	4.2	4.1	3.7	3.5	3.4	3.3	3.3	3.2	-2.7	-2.8
	0 / 20	5.0	4.6	4.2	4.1	3.7	3.5	3.4	3.3	3.3	3.2	-2.7	-2.8
	20 / 40	5.0	4.6	4.2	4.2	3.8	3.6	3.4	3.4	3.3	3.2	-2.8	-2.8
	40 / 60	5.1	4.7	4.2	4.2	3.8	3.6	3.4	3.4	3.3	3.2	-2.8	-2.8
	60 / 80	5.1	4.7	4.3	4.2	3.8	3.6	3.4	3.4	3.4	3.2	-2.9	-2.9
	80 / 100	5.1	4.7	4.3	4.2	3.8	3.6	3.4	3.4	3.4	3.2	-2.9	-2.9
	100 / 120	5.2	4.7	4.3	4.2	3.8	3.6	3.4	3.4	3.3	3.2	-3.0	-3.0
	120 / 140	5.1	4.7	4.3	4.2	3.8	3.5	3.4	3.3	3.3	3.1	-3.0	-3.1
	140 / 150	5.1	4.7	4.2	4.1	3.7	3.5	3.3	3.3	3.2	3.1	-3.0	-3.0
dn/dT & dν/dT (abs.)	-40 / -20	2.5	2.1	1.7	1.7	1.3	1.2	1.0	1.0	0.9	0.8	-2.6	-2.7
	-20 / 0	2.8	2.5	2.1	2.0	1.7	1.5	1.3	1.3	1.3	1.1	-2.7	-2.7
	0 / 20	3.2	2.8	2.4	2.3	2.0	1.8	1.6	1.6	1.6	1.4	-2.7	-2.8
	20 / 40	3.4	3.1	2.7	2.6	2.2	2.0	1.9	1.8	1.8	1.7	-2.8	-2.8
	40 / 60	3.7	3.3	2.9	2.8	2.4	2.2	2.1	2.0	2.0	1.9	-2.8	-2.8
	60 / 80	3.9	3.5	3.1	3.0	2.6	2.4	2.2	2.2	2.2	2.0	-2.9	-2.9
	80 / 100	4.0	3.6	3.2	3.2	2.8	2.5	2.4	2.3	2.3	2.1	-2.9	-2.9
	100 / 120	4.2	3.7	3.3	3.3	2.8	2.6	2.5	2.4	2.4	2.2	-3.0	-3.0
	120 / 140	4.2	3.8	3.4	3.3	2.9	2.7	2.5	2.5	2.4	2.3	-3.0	-3.0
	140 / 150	4.3	3.8	3.4	3.3	2.9	2.7	2.5	2.5	2.4	2.3	-3.0	-3.1

線膨張係数 α (×10^{-7}/℃) Coefficient of Thermal Expansion

(℃)	α
-40 / -30	54
-30 / -20	55
-20 / -10	56
-10 / 0	57
0 / 10	58
10 / 20	58
20 / 30	59
30 / 40	59
40 / 50	59
50 / 60	60
60 / 70	60
70 / 80	61
80 / 90	61
90 / 100	61
100 / 110	62
110 / 120	62
120 / 130	63
130 / 140	63
140 / 150	64

冷却速度による屈折率の変化 Difference of refractive indices by cooling rate

βC	
βd	
βF	
βg	

備 考 Remarks

硝種対照表 Glass Cross Reference Index

	HOYA	SCHOTT	OHARA	HIKARI	SUMITA	CDGM
Glass_Type	TAC6L	N-LAK33B	S-LAH97	J-LASKH2	K-LaSKn1	H-LaK53B
Code	755-523	755-523	755-523	755-523	755-524	755-523

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