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

NBFD26

834-260

n_d = 1.83401　ν_d = 25.97 (25.965)　$n_F - n_C$ = 0.032120
n_e = 1.84159　ν_e = 25.78 (25.775)　$n_{F'} - n_{C'}$ = 0.032651

屈折率 Refractive Index

	λ (nm)	
$n_{1529.6}$	1529.60	1.79020
$n_{1128.64}$	1128.64	1.79939
n_t	1013.98	1.80294
n_s	852.11	1.80976
$n_{A'}$	768.195	1.81483
n_r	706.519	1.81971
n_C	656.273	1.82475
$n_{C'}$	643.847	1.82619
n_{633}	632.8	1.82755
n_D	589.294	1.83373
n_d	587.562	1.83401
n_e	546.074	1.84159
n_F	486.133	1.85687
$n_{F'}$	479.991	1.85884
n_g	435.834	1.87639
n_h	404.656	1.89389
n_i	365.015	1.92713

分散式の定数 Constants of dispersion formula

A_0	3.2218201
A_1	$-1.5366364 \times 10^{-2}$
A_2	4.3038744×10^{-2}
A_3	3.0180924×10^{-3}
A_4	$-1.9606389 \times 10^{-4}$
A_5	2.6446283×10^{-5}

部分分散 Partial dispersions

$n_C - n_t$	0.021815
$n_d - n_C$	0.009262
$n_F - n_d$	0.022858
$n_g - n_F$	0.019517
$n_{C'} - n_t$	0.023257
$n_e - n_{C'}$	0.015399
$n_{F'} - n_e$	0.017252
$n_g - n_{F'}$	0.017544

部分分散比 Partial dispersion rates

P_{C_t}	0.6792	$P'_{C'\_t}$	0.7123
P_{d_C}	0.2884	$P'_{d\_C'}$	0.2395
P_{e_d}	0.2360	P'_{e_d}	0.2321
P_{F_e}	0.4757	$P'_{F'\_e}$	0.5284
P_{g_F}	0.6076	$P'_{g\_F'}$	0.5373
P_{h_g}	0.5450	P'_{h_g}	0.5361
P_{i_h}	1.0349	P'_{i_h}	1.0180

異常分散性 Anomalous dispersions

ΔP_{C_t}	0.0120
$\Delta P_{C\_A'}$	0.0005
ΔP_{g_d}	0.0067
ΔP_{g_F}	0.0061
ΔP_{i_g}	0.0688

光弾性定数 Photoelastic Constant

B (10^{-12}/Pa)	3.11

比重 Specific Gravity

d	3.43

化学的性質 Chemical Properties

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

熱的性質 Thermal Properties

T_g (℃)	548
T_s (℃)	588
$T_{10^{14.5}}$ (℃)	523
$T_{10^{13}}$ (℃)	546
$T_{10^{7.6}}$ (℃)	640
$\alpha_{-30/+70℃}$ (10^{-7}/℃)	81
$\alpha_{100/300℃}$ (10^{-7}/℃)	106
λ [W/(m·K)]	1.040
C_p [kJ/(kg·K)]	0.693

機械的性質 Mechanical Properties

H_K	555(6)
F_A	140
E (GPa)	105
G (GPa)	41.8
μ	0.250
σ_b (MPa)	

内部透過率 Internal Transmittance

λ (nm)	τ 2mm	τ 5mm	τ 10mm
2500	0.972	0.931	0.867
2400	0.978	0.946	0.895
2200	0.987	0.969	0.939
2000	0.994	0.986	0.972
1800	0.996	0.990	0.981
1600	0.998	0.996	0.992
1550	0.999	0.997	0.993
1500	0.999	0.997	0.993
1400	0.999	0.998	0.995
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	0.999
950	0.999	0.999	0.999
900	0.999	0.999	0.999
850	0.999	0.999	0.999
830	0.999	0.999	0.999
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	0.997
650	0.999	0.996	0.993
600	0.996	0.991	0.982
550	0.993	0.982	0.963
500	0.997	0.993	0.987
480	0.996	0.991	0.982
460	0.995	0.987	0.975
440	0.993	0.982	0.963
420	0.988	0.971	0.942
400	0.976	0.941	0.885
390	0.962	0.908	0.825
380	0.940	0.856	0.732
370	0.891	0.750	0.562
360	0.748	0.484	0.235
350	0.448	0.134	0.018
340			
330			
320			
310			
300			
290			
280			

屈折率の温度係数 dn/dT (×10^{-6}/℃) / アッベ数の温度係数 dν/dT (×10^{-3}/℃)
Temperature Coefficient of Refractive Index / 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	7.7	6.0	4.5	4.4	3.3	2.8	2.4	2.3	2.2	2.0	-1.7	-1.7
	-20 / 0	7.8	6.1	4.5	4.4	3.2	2.7	2.3	2.2	2.1	1.9	-1.7	-1.7
	0 / 20	8.0	6.2	4.6	4.4	3.2	2.7	2.3	2.2	2.1	1.8	-1.8	-1.8
	20 / 40	8.3	6.3	4.7	4.5	3.3	2.7	2.2	2.2	2.1	1.8	-1.9	-1.9
	40 / 60	8.5	6.5	4.7	4.6	3.3	2.7	2.2	2.1	2.0	1.7	-1.9	-1.9
	60 / 80	8.7	6.6	4.8	4.6	3.3	2.7	2.2	2.1	2.0	1.7	-2.0	-2.0
	80 / 100	8.9	6.8	4.9	4.7	3.3	2.7	2.2	2.1	2.0	1.6	-2.1	-2.1
	100 / 120	9.1	6.9	4.9	4.7	3.3	2.7	2.1	2.0	1.9	1.6	-2.2	-2.2
	120 / 140	9.3	7.0	5.0	4.8	3.3	2.6	2.1	2.0	1.9	1.5	-2.2	-2.2
	140 / 150	9.4	7.1	5.0	4.8	3.3	2.6	2.0	1.9	1.8	1.4	-2.3	-2.3
dn/dT & dν/dT (abs.)	-40 / -20	5.1	3.4	2.0	1.8	0.8	0.3	-0.1	-0.1	-0.2	-0.5	-1.7	-1.7
	-20 / 0	5.6	3.9	2.4	2.2	1.1	0.6	0.2	0.1	0.0	-0.2	-1.7	-1.7
	0 / 20	6.1	4.3	2.7	2.6	1.4	0.9	0.4	0.4	0.3	0.0	-1.8	-1.8
	20 / 40	6.6	4.7	3.0	2.9	1.6	1.1	0.7	0.6	0.5	0.2	-1.9	-1.9
	40 / 60	7.0	5.0	3.3	3.1	1.8	1.3	0.8	0.7	0.6	0.3	-2.0	-2.0
	60 / 80	7.4	5.3	3.5	3.4	2.0	1.4	1.0	0.9	0.8	0.4	-2.0	-2.0
	80 / 100	7.8	5.6	3.8	3.6	2.2	1.6	1.1	1.0	0.9	0.5	-2.1	-2.1
	100 / 120	8.1	5.9	3.9	3.7	2.3	1.7	1.1	1.0	0.9	0.6	-2.2	-2.2
	120 / 140	8.4	6.1	4.1	3.9	2.4	1.7	1.2	1.1	1.0	0.6	-2.2	-2.2
	140 / 150	8.6	6.2	4.1	3.9	2.4	1.7	1.2	1.1	1.0	0.6	-2.3	-2.3

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

(℃)	α
-40 / -30	77
-30 / -20	78
-20 / -10	79
-10 / 0	80
0 / 10	81
10 / 20	81
20 / 30	82
30 / 40	82
40 / 50	83
50 / 60	84
60 / 70	85
70 / 80	85
80 / 90	86
90 / 100	88
100 / 110	89
110 / 120	91
120 / 130	92
130 / 140	94
140 / 150	97

着色度 Coloration Code

λ80(λ70)/λ5	440/355

着色度(内部透過率) Coloration of Internal Transmittance

λτ80/λτ5	387/352

CCI Color Contribution Index

CCI(G)	2.13
CCI(R)	2.31

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	NBFD26					
Code	834-260					

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