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

E-FD1

717-295

$n_d = 1.71736$　$\nu_d = 29.50$　$n_F - n_C = 0.024318$
$n_e = 1.72310$　$\nu_e = 29.27$　$n_{F'} - n_{C'} = 0.024707$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.69354
n_s	852.11	1.69886
$n_{A'}$	768.19	1.70275
n_r	706.52	1.70648
n_C	656.27	1.71032
$n_{C'}$	643.85	1.71142
n_{633}	632.80	1.71245
n_D	589.29	1.71715
n_d	587.56	1.71736
n_e	546.07	1.72310
n_F	486.13	1.73464
$n_{F'}$	479.99	1.73613
n_g	435.84	1.74931
n_h	404.66	1.76244
n_i	365.01	1.78736

分散式の定数 Constants of dispersion formula	
A_0	2.8508499
A_1	$-1.3234610 \times 10^{-2}$
A_2	2.9415325×10^{-2}
A_3	2.5542666×10^{-3}
A_4	$-2.1232133 \times 10^{-4}$
A_5	2.2261936×10^{-5}

部分分散 Partial dispersions	
$n_C - n_t$	0.016779
$n_d - n_C$	0.007037
$n_F - n_d$	0.017281
$n_g - n_F$	0.014672
$n_{C'} - n_t$	0.017876
$n_e - n_{C'}$	0.011682
$n_{F'} - n_e$	0.013025
$n_g - n_{F'}$	0.013186

部分分散比 Partial dispersion rates			
P_{C_t}	0.6900	$P'_{C'\_t}$	0.7235
P_{d_C}	0.2894	$P'_{d\_C'}$	0.2404
P_{e_d}	0.2361	P'_{e_d}	0.2324
P_{F_e}	0.4745	$P'_{F'\_e}$	0.5272
P_{g_F}	0.6033	$P'_{g\_F'}$	0.5337
P_{h_g}	0.5396	P'_{h_g}	0.5311
P_{i_h}	1.0247	P'_{i_h}	1.0086

異常分散性 Anomalous dispersions	
ΔP_{C_t}	0.0062
$\Delta P_{C\_A'}$	-0.0014
ΔP_{g_d}	0.0094
ΔP_{g_F}	0.0082
ΔP_{i_g}	0.0842

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

熱的性質 Thermal Properties	
T_g (℃)	592
T_s (℃)	634
$T_{10^{14.5}}$ (℃)	566
$T_{10^{13}}$ (℃)	583
$T_{10^{7.6}}$ (℃)	680
$\alpha_{-30/+70℃}$ (10^{-7}/K)	92
$\alpha_{100/300℃}$ (10^{-7}/K)	109
λ [W/(m·K)]	0.965
C_P [kJ/(kg·K)]	0.664

機械的性質 Mechanical Properties	
H_K	535(5)
F_A	170
E (GPa)	87
G (GPa)	34.6
μ	0.258
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	0.9	-1.4
-20/ 0	1.0	-1.0
0/+20	1.1	-0.6
+20/+40	1.3	-0.2
+40/+60	1.5	0.2
+60/+80	1.7	0.5

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

比重 Specific Gravity	
d	3.08

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.996	0.992
1500	0.996	0.993
1400	0.997	0.994
1300	0.999	0.998
1200	0.999	0.998
1100	0.999	0.998
1060	0.999	0.998
1050	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.997
850	0.999	0.998
830	0.998	0.997
800	0.999	0.997
780	0.999	0.998
750	0.999	0.998
700	0.998	0.997
650	0.998	0.995
600	0.998	0.996
550	0.998	0.996
500	0.994	0.988
480	0.991	0.982
460	0.988	0.976
440	0.984	0.968
420	0.973	0.948
400	0.932	0.868
390	0.873	0.762
380	0.737	0.543
370	0.462	0.214
360	0.124	0.015
350		
340		
330		
320		
310		
300		
290		
280		

着色度 Coloration Code	
λ80(λ70)/λ5	415/365

着色度(内部透過率) Coloration of Internal Transmittance	
λτ80/λτ5	393/363

備考 Remarks

硝種対照表 Glass Cross Reference Index

	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	E-FD1	N-SF1	S-TIH1	E-SF1	H-ZF3
Code	717-295	717-296	717-295	717-295	717-295

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