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

FDS18

946-180

$n_d = 1.94595$　$\nu_d = 17.98$　$n_F - n_C = 0.052599$
$n_e = 1.95825$　$\nu_e = 17.84$　$n_{F'} - n_{C'} = 0.053718$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.89799
n_s	852.11	1.90819
$n_{A'}$	768.19	1.91587
n_r	706.52	1.92337
n_C	656.27	1.93123
$n_{C'}$	643.85	1.93350
n_{633}	632.80	1.93564
n_D	589.29	1.94550
n_d	587.56	1.94595
n_e	546.07	1.95825
n_F	486.13	1.98383
$n_{F'}$	479.99	1.98722
n_g	435.84	2.01825
n_h	404.66	2.05106
n_i	365.01	

分散式の定数 Constants of dispersion formula	
A_0	3.5637840
A_1	$-2.5449644 \times 10^{-2}$
A_2	5.8401659×10^{-2}
A_3	9.2310983×10^{-3}
A_4	$-9.5499727 \times 10^{-4}$
A_5	1.1777456×10^{-4}

部分分散 Partial dispersions	
$n_C - n_t$	0.033239
$n_d - n_C$	0.014713
$n_F - n_d$	0.037886
$n_g - n_F$	0.034423
$n_{C'} - n_t$	0.035505
$n_e - n_{C'}$	0.024751
$n_{F'} - n_e$	0.028967
$n_g - n_{F'}$	0.031038

部分分散比 Partial dispersion rates			
P_{C_t}	0.6319	$P'_{C'\_t}$	0.6610
P_{d_C}	0.2797	$P'_{d\_C'}$	0.2317
P_{e_d}	0.2339	P'_{e_d}	0.2290
P_{F_e}	0.4864	$P'_{F'\_e}$	0.5392
P_{g_F}	0.6544	$P'_{g\_F'}$	0.5778
P_{h_g}	0.6236	P'_{h_g}	0.6107
P_{i_h}		P'_{i_h}	

異常分散性 Anomalous dispersions	
ΔP_{C_t}	0.0020
$\Delta P_{C\_A'}$	-0.0066
ΔP_{g_d}	0.0439
ΔP_{g_F}	0.0386
ΔP_{i_g}	

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

熱的性質 Thermal Properties	
T_g (℃)	637
T_s (℃)	689
$T_{10^{14.5}}$ (℃)	615
$T_{10^{13}}$ (℃)	632
$T_{10^{7.6}}$ (℃)	737
$\alpha_{-30/+70℃}$ (10^{-7}/K)	57
$\alpha_{100/300℃}$ (10^{-7}/K)	71
λ [W/(m·K)]	1.020
C_P [kJ/(kg·K)]	0.610

機械的性質 Mechanical Properties	
H_K	460(5)
F_A	190
E (GPa)	103
G (GPa)	41.6
μ	0.243
σ_b (MPa)	86

屈折率の温度係数 ($\times 10^{-6}$/K) Thermal coefficient of refractive indices		
(℃)	dn/dT (rel.)	dn/dT (abs.)
-40/-20	2.8	0.2
-20/ 0	3.0	0.8
0/+20	3.4	1.4
+20/+40	3.7	2.0
+40/+60	4.1	2.6
+60/+80	4.5	3.1

光弾性定数 Photoelastic Constant	
B (10^{-12}/Pa)	3.46

比重 Specific Gravity	
d	3.51

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.990	0.980
1500	0.989	0.979
1400	0.991	0.982
1300	0.993	0.986
1200	0.994	0.988
1100	0.995	0.990
1060	0.995	0.990
1050	0.995	0.990
1000	0.996	0.992
950	0.997	0.993
900	0.998	0.996
850	0.999	0.998
830	0.999	0.999
800	0.998	0.996
780	0.998	0.995
750	0.997	0.994
700	0.996	0.992
650	0.993	0.987
600	0.991	0.982
550	0.983	0.966
500	0.961	0.923
480	0.945	0.894
460	0.919	0.845
440	0.862	0.743
420	0.701	0.491
400	0.272	0.074
390		
380		
370		
360		
350		
340		
330		
320		
310		
300		
290		
280		

着色度 Coloration Code	
λ80(λ70)/λ5	(470)/400

着色度 (内部透過率) Coloration of Internal Transmittance	
λτ80/λτ5	449/398

備考 Remarks

硝種対照表　Glass Cross Reference Index

	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	FDS18		(S-NPH3)		
Code	946-180		959-175		

作成 201104