ガラスモールドレンズ用硝種　Glass molded lens

M-BACD5N

589-613

$n_d = 1.58913$　$\nu_d = 61.25$　$n_F - n_C = 0.009619$
$n_e = 1.59142$　$\nu_e = 61.03$　$n_{F'} - n_{C'} = 0.009690$

屈折率 Refractive Index		
	λ (nm)	
n_t	1013.98	1.57792
n_s	852.11	1.58084
$n_{A'}$	768.19	1.58276
n_r	706.52	1.58449
n_C	656.27	1.58618
$n_{C'}$	643.85	1.58665
n_{633}	632.80	1.58709
n_D	589.29	1.58904
n_d	587.56	1.58913
n_e	546.07	1.59142
n_F	486.13	1.59580
$n_{F'}$	479.99	1.59634
n_g	435.84	1.60097
n_h	404.66	1.60524
n_i	365.01	1.61247

分散式の定数 Constants of dispersion formula	
A_0	2.4895100
A_1	$-1.2244960 \times 10^{-2}$
A_2	1.2942620×10^{-2}
A_3	3.4904490×10^{-4}
A_4	$-1.7772280 \times 10^{-5}$
A_5	9.1137190×10^{-7}

部分分散 Partial dispersions	
$n_C - n_t$	0.008264
$n_d - n_C$	0.002948
$n_F - n_d$	0.006671
$n_g - n_F$	0.005168
$n_{C'} - n_t$	0.008736
$n_e - n_{C'}$	0.004771
$n_{F'} - n_e$	0.004919
$n_g - n_{F'}$	0.004625

部分分散比 Partial dispersion rates			
P_{C_t}	0.8591	$P'_{C'\_t}$	0.9015
P_{d_C}	0.3065	$P'_{d\_C'}$	0.2555
P_{e_d}	0.2386	P'_{e_d}	0.2368
P_{F_e}	0.4549	$P'_{F'\_e}$	0.5076
P_{g_F}	0.5373	$P'_{g\_F'}$	0.4773
P_{h_g}	0.4436	P'_{h_g}	0.4404
P_{i_h}	0.7523	P'_{i_h}	0.7467

異常分散性 Anomalous dispersions	
ΔP_{C_t}	0.0271
$\Delta P_{C\_A'}$	0.0041
ΔP_{g_d}	-0.0014
ΔP_{g_F}	-0.0007
ΔP_{i_g}	-0.0034

化学的性質 Chemical Properties	
D_W	2
D_A	4
T_{Blue}	2
D_{NaOH}	2
D_{STPP}	2
D_0	3
D_H	3

熱的性質 Thermal Properties	
T_g (℃)	521
T_s (℃)	562
$T_{10^{14.5}}$ (℃)	493
$T_{10^{13}}$ (℃)	514
$T_{10^{7.6}}$ (℃)	604
$\alpha_{-30/+70℃}$ (10^{-7}/K)	68
$\alpha_{100/300℃}$ (10^{-7}/K)	88
λ [W/(m·K)]	1.197
C_P [kJ/(kg·K)]	0.816

機械的性質 Mechanical Properties	
H_K	600(6)
F_A	90
E (GPa)	98
G (GPa)	38.9
μ	0.254
σ_b (MPa)	104

屈折率の温度係数 (×10^{-6}/K) Thermal coefficient of refractive indices		
(℃)	dn/dT (rel.)	dn/dT (abs.)
-40/-20	3.8	1.6
-20/ 0	3.7	1.9
0/+20	3.7	2.2
+20/+40	3.8	2.4
+40/+60	3.8	2.6
+60/+80	3.9	2.8

光弾性定数 Photoelastic Constant	
B (10^{-12}/Pa)	2.13

比重 Specific Gravity	
d	2.82

内部透過率 Internal Transmittance		
λ (nm)	τ 5mm	τ 10mm
1550	0.995	0.990
1500	0.994	0.989
1400	0.991	0.981
1300	0.996	0.992
1200	0.996	0.992
1100	0.996	0.991
1060	0.995	0.990
1050	0.996	0.991
1000	0.996	0.991
950	0.996	0.991
900	0.996	0.992
850	0.996	0.992
830	0.996	0.992
800	0.996	0.993
780	0.997	0.994
750	0.998	0.996
700	0.999	0.999
650	0.999	0.999
600	0.999	0.999
550	0.999	0.999
500	0.999	0.999
480	0.999	0.999
460	0.999	0.998
440	0.999	0.997
420	0.998	0.996
400	0.997	0.994
390	0.995	0.990
380	0.992	0.984
370	0.986	0.972
360	0.973	0.946
350	0.949	0.900
340	0.907	0.822
330	0.838	0.702
320	0.731	0.534
310	0.587	0.344
300	0.421	0.177
290	0.264	0.070
280	0.144	0.021

着色度 Coloration Code	
λ80(λ70)/λ5	350/290

着色度(内部透過率) Coloration of Internal Transmittance	
λτ80/λτ5	338/287

備考 Remarks

硝種対照表　Glass Cross Reference Index

	HOYA	SCHOTT	OHARA	HIKARI	CDGM
Glass Type	M-BACD5N		L-BAL35	Q-SK5S	D-ZK3
Code	589-613		589-612	589-612	589-612

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