

H-QK3L	487704
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nd =1.48749	vd =70.44	nF – nC =0.006921
ne =1.48914	ve =70.24	nF' - nc' =0.006964

Refractive Indices		
	λ (nm)	
n_r	706.5	1.48411
n_c	656.3	1.48535
$n_{c'}$	643.8	1.48569
n_{He-Ne}	632.8	1.48601
n_D	589.3	1.48743
n_d	587.6	1.48749
n_e	546.1	1.48914
n_F	486.1	1.49227
$n_{F'}$	480.0	1.49266
n_g	435.8	1.49594
n_h	404.7	1.49896
n_i	365.0	1.50405

Constants of Dispersion (Cauchy)	
A_0	2.1894054
A_1	$-9.9044908 \times 10^{-3}$
A_2	8.6403370×10^{-3}
A_3	2.2263067×10^{-4}
A_4	$-1.2291942 \times 10^{-5}$
A_5	5.9386349×10^{-7}

Relative Partial Dispersions			
$P_{d,c}$	0.3092	$P'_{d,c'}$	0.2582
$P_{e,d}$	0.2384	$P'_{e,d}$	0.2367
$P_{g,F}$	0.5303	$P'_{g,F'}$	0.4706

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.001
$\Delta P_{g,F}$	0.0037

NHG	HOYA	OHARA	SCHOTT
H-QK3L	FC5	S-FSL5	N-FK5

Chemical Properties	
	Group
RC(S)	1
RA(S)	3
DW	2
DA	4

Thermal Properties	
T_g (°C)	473
T_S (°C)	568
$T_{10}^{14.5}$ (°C)	432
T_{10}^{13} (°C)	466
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	99.06
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	106.29

Mechanical Properties	
Hardness ($10^7 Pa$)	520
FA (Relative Abrasion)	0.90
Young's Modulus ($10^7 Pa$)	6230
Rigidity Modulus ($10^7 Pa$)	2540
Poisson's Ratio	0.227

Photoelastic Constant	
β ($10^{-12}/Pa$)	2.87

Color	
λ_{80}/λ_5	31/27

Specific Gravity	
ρ (g/cm^3)	2.48

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.86	0.74
2200	0.941	0.885
2000	0.980	0.960
1800	0.988	0.976
1600	0.990	0.980
1400	0.994	0.988
1200	0.998	0.996
1060	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.999
850	0.999	0.999
800	0.999	0.999
700	0.999	0.999
650	0.999	0.998
600	0.999	0.998
550	0.999	0.998
500	0.999	0.998
480	0.999	0.998
460	0.999	0.998
440	0.998	0.997
420	0.998	0.997
400	0.999	0.998
390	0.999	0.998
380	0.997	0.994
370	0.997	0.995
360	0.997	0.994
350	0.995	0.991
340	0.992	0.984
330	0.983	0.966
320	0.962	0.925
310	0.91	0.83
300	0.81	0.65
290	0.58	0.34
280	0.26	0.07



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