

<b>H-ZK10</b>	<b>622567</b>
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nd =1.6221	vd =56.71	nF – nC =0.01097
ne =1.6247	ve =56.38	nF' - nc' =0.01108

Refractive Indices		
	$\lambda$ ( nm )	
$n_r$	706.5	1.61688
$n_c$	656.3	1.61877
$n_{c'}$	643.8	1.61929
$n_{He-Ne}$	632.8	1.61979
$n_D$	589.3	1.622
$n_d$	587.6	1.6221
$n_e$	546.1	1.6247
$n_F$	486.1	1.62974
$n_{F'}$	480.0	1.63037
$n_g$	435.8	1.63575
$n_h$	404.7	1.64074
$n_i$	365.0	1.64930

Constants of Dispersion (Cauchy)	
$A_0$	2.5792783
$A_1$	$-5.68181961 \times 10^{-3}$
$A_2$	$2.02946711 \times 10^{-2}$
$A_3$	$-1.00218751 \times 10^{-3}$
$A_4$	$1.67875511 \times 10^{-4}$
$A_5$	$-7.93711791 \times 10^{-6}$

Relative Partial Dispersions			
$P_{d,c}$	0.3036	$P'_{d,c'}$	0.2536
$P_{e,d}$	0.237	$P'_{e,d}$	0.2347
$P_{g,F}$	0.5479	$P'_{g,F'}$	0.4856

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	-0.0015

NHG	HOYA	OHARA	SCHOTT
H-ZK10	E-BaCD10	S-BSM10	N-SK10

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

Thermal Properties	
$T_g$ ( °C )	650
$T_s$ ( °C )	700
$T_{10}^{14.5}$ ( °C )	600
$T_{10}^{13}$ ( °C )	637
$\alpha_{20/120^\circ C}$ ( $10^{-7}/K$ )	65.31
$\alpha_{20/300^\circ C}$ ( $10^{-7}/K$ )	73.15

Mechanical Properties	
Hardness ( $10^7 Pa$ )	598
FA (Relative Abrasion)	0.54
Young's Modulus ( $10^7 Pa$ )	8251
Rigidity Modulus ( $10^7 Pa$ )	3247
Poisson's Ratio	0.27

Photoelastic Constant	
$\beta$ ( $10^{-12}/Pa$ )	

Color	
$\lambda_{80}/\lambda_5$	37/32

Specific Gravity	
$\rho$ ( $g/cm^3$ )	3.63

Internal Transmission		
$\lambda$ ( nm )	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.909	0.827
2200	0.957	0.915
2000	0.986	0.972
1800	0.994	0.988
1600	0.997	0.994
1400	0.998	0.997
1200	0.998	0.997
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.999	0.998
800	0.998	0.997
700	0.998	0.996
650	0.997	0.995
600	0.997	0.995
550	0.997	0.995
500	0.997	0.994
480	0.996	0.992
460	0.995	0.991
440	0.995	0.990
420	0.993	0.987
400	0.989	0.978
390	0.983	0.966
380	0.973	0.946
370	0.951	0.905
360	0.908	0.824
350	0.82	0.670
340	0.65	0.420
330	0.37	0.140
320	0.1	0.010
310		
300		
290		
280		



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