

## N-KZFS11 638424.320

$n_d = 1.63775$	$v_d = 42.41$	$n_F - n_C = 0.015038$
$n_e = 1.64132$	$v_e = 42.20$	$n_{F'} - n_{C'} = 0.015198$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.59699
$n_{1970.1}$	1970.1	1.60439
$n_{1529.6}$	1529.6	1.61223
$n_{1060.0}$	1060.0	1.62044
$n_t$	1014.0	1.62139
$n_s$	852.1	1.62540
$n_r$	706.5	1.63069
$n_C$	656.3	1.63324
$n_{C'}$	643.8	1.63395
$n_{632.8}$	632.8	1.63462
$n_D$	589.3	1.63762
$n_d$	587.6	1.63775
$n_e$	546.1	1.64132
$n_F$	486.1	1.64828
$n_{F'}$	480.0	1.64915
$n_g$	435.8	1.65670
$n_h$	404.7	1.66385
$n_i$	365.0	1.67636
$n_{334.1}$	334.1	1.69037
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.507	0.183
2325	0.779	0.535
1970	0.965	0.914
1530	0.991	0.977
1060	0.999	0.999
700	0.998	0.994
660	0.997	0.992
620	0.997	0.992
580	0.997	0.992
546	0.997	0.993
500	0.996	0.989
460	0.993	0.982
436	0.991	0.978
420	0.990	0.975
405	0.988	0.971
400	0.987	0.968
390	0.983	0.957
380	0.976	0.940
370	0.963	0.910
365	0.950	0.880
350	0.882	0.730
334	0.727	0.450
320	0.468	0.150
310	0.230	0.020
300	0.048	
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2664
$P_{C,s}$	0.5212
$P_{d,C}$	0.3000
$P_{e,d}$	0.2377
$P_{g,F}$	0.5605
$P_{i,h}$	0.8319
$P'_{s,t}$	0.2636
$P'_{C',s}$	0.5627
$P'_{d,C'}$	0.2499
$P'_{e,d}$	0.2352
$P'_{g,F'}$	0.4971
$P'_{i,h}$	0.8232

### Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"

$\Delta P_{C,t}$	0.0415
$\Delta P_{C,s}$	0.0194
$\Delta P_{F,e}$	-0.0039
$\Delta P_{g,F}$	-0.0120
$\Delta P_{i,g}$	-0.0617

Constants of Dispersion Formula	
$B_1$	1.3322245
$B_2$	0.28924161
$B_3$	1.15161734
$C_1$	0.0084029848
$C_2$	0.034423972
$C_3$	88.4310532

Constants of Dispersion $dn/dT$	
$D_0$	$3.34 \cdot 10^{-6}$
$D_1$	$1.16 \cdot 10^{-8}$
$D_2$	$-1.80 \cdot 10^{-11}$
$E_0$	$6.32 \cdot 10^{-7}$
$E_1$	$7.21 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.206

Color Code	
$\lambda_{80}/\lambda_5$	36/30
(* = $\lambda_{70}/\lambda_5$ )	

Remarks
suitable for precision molding, step 0.5 available

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	6.6
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	7.6
$T_g [^\circ C]$	551
$T_{10}^{13.0} [^\circ C]$	554
$T_{10}^{7.6} [^\circ C]$	0
$c_p [J/(g \cdot K)]$	0.690
$\lambda [W/(m \cdot K)]$	0.810
$\rho [g/cm^3]$	3.20
$E [10^3 N/mm^2]$	79
$\mu$	0.251
$K [10^{-6} mm^2/N]$	4.21
$HK_{0.1/20}$	530
<b>HG</b>	3
<b>Abrasion Aa</b>	74
<b>CR</b>	1
<b>FR</b>	1
<b>SR</b>	3.4
<b>AR</b>	1
<b>PR</b>	1

Temperature Coefficients of Refractive Index						
[°C]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/ -20	3.5	4.4	5.4	1.3	2.2	3.1
+20/ +40	3.5	4.6	5.7	2.1	3.1	4.2
+60/ +80	3.6	4.8	6.0	2.5	3.7	4.8