

N-KZFS8 720347.320

$n_d = 1.72047$
 $n_e = 1.72539$

$v_d = 34.70$
 $v_e = 34.47$

$n_F - n_C = 0.020763$
 $n_{F'} - n_{C'} = 0.021046$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67524
$n_{1970.1}$	1970.1	1.68193
$n_{1529.6}$	1529.6	1.68939
$n_{1060.0}$	1060.0	1.69816
n_t	1014.0	1.69927
n_s	852.1	1.70416
n_r	706.5	1.71099
n_C	656.3	1.71437
$n_{C'}$	643.8	1.71532
$n_{632.8}$	632.8	1.71622
n_D	589.3	1.72029
n_d	587.6	1.72047
n_e	546.1	1.72539
n_F	486.1	1.73513
$n_{F'}$	480.0	1.73637
n_g	435.8	1.74724
n_h	404.7	1.75777
n_i	365.0	1.77690
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.626936510
B_2	0.243698760
B_3	1.620071410
C_1	0.010880863
C_2	0.0494207753
C_3	131.00916300

Constants of Formula for dn/dT

D_0	7.93E-07
D_1	6.47E-09
D_2	-5.00E-12
E_0	7.71E-07
E_1	1.01E-09
λ_{TK} [μm]	0.254

Temperature Coefficients of the 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	2.7	4.1	5.6	0.4	1.7	3.2
+20/+40	2.4	4.0	5.8	0.9	2.5	4.2
+60/+80	2.4	4.1	6.1	1.2	2.9	4.9

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.510
2325	0.870	0.700
1970	0.967	0.920
1530	0.993	0.983
1060	0.999	0.999
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.997	0.993
500	0.994	0.985
460	0.988	0.971
436	0.982	0.955
420	0.976	0.940
405	0.967	0.920
400	0.963	0.910
390	0.950	0.870
380	0.920	0.820
370	0.890	0.740
365	0.860	0.680
350	0.670	0.360
334	0.140	0.010
320	0.040	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ_{80} / λ_5 38/33

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2353
$P_{C,s}$	0.4916
$P_{d,C}$	0.2940
$P_{e,d}$	0.2369
$P_{g,F}$	0.5833
$P_{i,h}$	0.9212

Relative Partial Dispersion P'

$P'_{s,t}$	0.2322
$P'_{C,s}$	0.5305
$P'_{d,C'}$	0.2445
$P'_{e,d}$	0.2337
$P'_{g,F'}$	0.5165
$P'_{i,h}$	0.9088

Deviation of Rel. Partial Disp.

ΔP from the normal line

$\Delta P_{C,t}$	0.0173
$\Delta P_{C,s}$	0.0078
$\Delta P_{F,e}$	-0.0011
$\Delta P_{g,F}$	-0.0021
$\Delta P_{i,g}$	-0.0048

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/K$]	7.8
$\alpha_{+20/+300^\circ\text{C}}$ [$10^{-6}/K$]	9.4
T_g [°C]	509
T_{10}^{13} [°C]	515
$T_{10}^{7.6}$ [°C]	635
c_p [J/(g·K)]	0.760
λ [W/(m·K)]	1.050
AT [°C]	561
ρ [g/cm ³]	3.20
E [10^3 N/mm ²]	103
μ	0.248
K [10^{-6} mm ² /N]	2.94
HK _{0.1/20}	570
HG	4
Abrasion Aa	152