

N-KZFS4 613445.300

$n_d = 1.61336$
 $n_e = 1.61664$

$v_d = 44.49$
 $v_e = 44.27$

$n_F - n_C = 0.013785$
 $n_{F'} - n_{C'} = 0.013929$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57535
$n_{1970.1}$	1970.1	1.58233
$n_{1529.6}$	1529.6	1.58971
$n_{1060.0}$	1060.0	1.59739
n_t	1014.0	1.59828
n_s	852.1	1.60199
n_r	706.5	1.60688
n_C	656.3	1.60922
$n_{C'}$	643.8	1.60987
$n_{632.8}$	632.8	1.61049
n_D	589.3	1.61324
n_d	587.6	1.61336
n_e	546.1	1.61664
n_F	486.1	1.62300
$n_{F'}$	480.0	1.62380
n_g	435.8	1.63071
n_h	404.7	1.63723
n_i	365.0	1.64865
$n_{334.1}$	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	1.350554240
B_2	0.197575506
B_3	1.099629920
C_1	0.008762821
C_2	0.0371767201
C_3	90.38669940

Constants of Formula for dn/dT

D_0	1.81E-06
D_1	1.16E-08
D_2	-7.99E-12
E_0	6.20E-07
E_1	7.94E-10
λ_{TK} [μm]	0.205

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	3.5	4.4	0.5	1.3	2.2
+20/+40	2.7	3.7	4.7	1.3	2.3	3.2
+60/+80	2.8	3.9	5.0	1.7	2.8	3.9

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.510	0.190
2325	0.750	0.490
1970	0.951	0.880
1530	0.984	0.961
1060	0.998	0.996
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.992
500	0.995	0.987
460	0.990	0.976
436	0.987	0.968
420	0.984	0.961
405	0.981	0.952
400	0.979	0.950
390	0.971	0.930
380	0.963	0.910
370	0.940	0.860
365	0.920	0.820
350	0.820	0.600
334	0.470	0.150
320	0.040	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ_{80} / λ_5 36/32

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2694
$P_{C,s}$	0.5240
$P_{d,C}$	0.3006
$P_{e,d}$	0.2378
$P_{g,F}$	0.5590
$P_{i,h}$	0.8284

Relative Partial Dispersion P'

$P'_{s,t}$	0.2666
$P'_{C,s}$	0.5657
$P'_{d,C'}$	0.2503
$P'_{e,d}$	0.2353
$P'_{g,F'}$	0.4958
$P'_{i,h}$	0.8199

Deviation of Rel. Partial Disp.

ΔP from the normal line

$\Delta P_{C,t}$	0.0373
$\Delta P_{C,s}$	0.0173
$\Delta P_{F,e}$	-0.0033
$\Delta P_{g,F}$	-0.0100
$\Delta P_{i,g}$	-0.0496

Chemical Properties

CR	1
FR	1
SR	3.4
AR	1.2
PR	1
SR-J	6
WR-J	4

Other Properties

$\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/K$]	7.3
$\alpha_{+20/+300^\circ\text{C}}$ [$10^{-6}/K$]	8.2
T_g [°C]	536
T_{10}^{13} [°C]	541
$T_{10}^{7.6}$ [°C]	664
c_p [J/(g·K)]	0.760
λ [W/(m·K)]	0.840
AT [°C]	597
ρ [g/cm ³]	3.00
E [10^3 N/mm ²]	78
μ	0.241
K [10^{-6} mm ² /N]	3.90
HK _{0.1/20}	520
HG	3
Abrasion Aa	130