

N-FK5 487704.245

$n_d = 1.48749$
 $n_e = 1.48914$

$v_d = 70.41$
 $v_e = 70.23$

$n_F - n_C = 0.006924$
 $n_{F'} - n_{C'} = 0.006965$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.46181
$n_{1970.1}$	1970.1	1.46738
$n_{1529.6}$	1529.6	1.47312
$n_{1060.0}$	1060.0	1.47855
n_t	1014.0	1.47912
n_s	852.1	1.48137
n_r	706.5	1.48410
n_C	656.3	1.48535
$n_{C'}$	643.8	1.48569
$n_{632.8}$	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	1.49593
n_h	404.7	1.49894
n_i	365.0	1.50401
$n_{334.1}$	334.1	1.50939
$n_{312.6}$	312.6	1.51428
$n_{296.7}$	296.7	1.51867
$n_{280.4}$	280.4	1.52415
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.844309338
B_2	0.344147824
B_3	0.910790213
C_1	0.004751120
C_2	0.0149814849
C_3	97.86002930

Constants of Formula for dn/dT

D_0	-7.24E-06
D_1	1.58E-08
D_2	-9.51E-12
E_0	3.51E-07
E_1	4.61E-10
λ_{TK} [μm]	0.156

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	-1.5	-1.2	-0.9	-3.5	-3.2	-2.9
+20/+40	-1.4	-1.0	-0.6	-2.6	-2.3	-2.0
+60/+80	-1.2	-0.7	-0.3	-2.2	-1.8	-1.4

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.680	0.380
2325	0.830	0.630
1970	0.971	0.930
1530	0.986	0.965
1060	0.999	0.998
700	0.998	0.995
660	0.996	0.991
620	0.996	0.990
580	0.996	0.991
546	0.996	0.991
500	0.996	0.989
460	0.996	0.990
436	0.997	0.992
420	0.997	0.993
405	0.998	0.994
400	0.998	0.994
390	0.998	0.994
380	0.996	0.991
370	0.997	0.992
365	0.997	0.992
350	0.995	0.988
334	0.991	0.977
320	0.980	0.950
310	0.954	0.890
300	0.900	0.760
290	0.760	0.500
280	0.500	0.180
270	0.220	0.020
260	0.060	0.000
250	0.000	

Color Code

λ_{80} / λ_5 30/26

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3252
$P_{C,s}$	0.5740
$P_{d,C}$	0.3097
$P_{e,d}$	0.2388
$P_{g,F}$	0.5290
$P_{i,h}$	0.7319

Relative Partial Dispersion P'

$P'_{s,t}$	0.3232
$P'_{C,s}$	0.6201
$P'_{d,C'}$	0.2584
$P'_{e,d}$	0.2374
$P'_{g,F'}$	0.4704
$P'_{i,h}$	0.7276

Deviation of Rel. Partial Disp.

ΔP from the normal line

$\Delta P_{C,t}$	0.0202
$\Delta P_{C,s}$	0.0070
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0036
$\Delta P_{i,g}$	0.0322

Chemical Properties

CR	2
FR	1
SR	4
AR	2
PR	2.3
SR-J	5
WR-J	4

Other Properties

$\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/K$]	9.2
$\alpha_{+20/+300^\circ\text{C}}$ [$10^{-6}/K$]	10.0
T_g [°C]	466
T_{10}^{13} [°C]	469
$T_{10}^{7.6}$ [°C]	672
c_p [J/(g·K)]	0.808
λ [W/(m·K)]	0.925
AT [°C]	557
ρ [g/cm ³]	2.45
E [10^3 N/mm ²]	62
μ	0.232
K [10^{-6} mm ² /N]	2.91
HK _{0.1/20}	520
HG	3
Abrasion Aa	109