

## N-SF6HTultra 805254.337

$n_d = 1.80518$	$v_d = 25.36$	$n_F - n_C = 0.031750$
$n_e = 1.81266$	$v_e = 25.16$	$n_{F'} - n_{C'} = 0.032304$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.74895
$n_{1970.1}$	1970.1	1.75541
$n_{1529.6}$	1529.6	1.76307
$n_{1060.0}$	1060.0	1.77341
$n_t$	1014.0	1.77486
$n_s$	852.1	1.78144
$n_r$	706.5	1.79114
$n_C$	656.3	1.79608
$n_{C'}$	643.8	1.79749
$n_{632.8}$	632.8	1.79883
$n_D$	589.3	1.80491
$n_d$	587.6	1.80518
$n_e$	546.1	1.81266
$n_F$	486.1	1.82783
$n_{F'}$	480.0	1.82980
$n_g$	435.8	1.84738
$n_h$	404.7	1.86506
$n_i$	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.796	0.565
2325	0.826	0.620
1970	0.948	0.876
1530	0.992	0.981
1060	0.999	0.999
700	0.994	0.984
660	0.991	0.978
620	0.992	0.980
580	0.994	0.984
546	0.992	0.981
500	0.984	0.960
460	0.972	0.932
436	0.961	0.906
420	0.945	0.869
405	0.910	0.790
400	0.887	0.742
390	0.805	0.581
380	0.604	0.283
370	0.217	0.022
365	0.004	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2074
$P_{C,s}$	0.4610
$P_{d,C}$	0.2867
$P_{e,d}$	0.2356
$P_{g,F}$	0.6158
$P_{i,h}$	
$P'_{s,t}$	0.2039
$P'_{C',s}$	0.4969
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	-0.0010
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0146
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	1.77931763
$B_2$	0.338149866
$B_3$	2.08734474
$C_1$	0.0133714182
$C_2$	0.0617533621
$C_3$	174.01759

Constants of Dispersion $dn/dT$	
$D_0$	$-4.93 \cdot 10^{-6}$
$D_1$	$7.02 \cdot 10^{-9}$
$D_2$	$-2.40 \cdot 10^{-11}$
$E_0$	$9.84 \cdot 10^{-7}$
$E_1$	$1.54 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.29

Color Code	
$\lambda_{80}/\lambda_5$	43/37
(*= $\lambda_{70}/\lambda_5$ )	

Remarks	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	9.0
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	10.3
$T_g [^\circ C]$	589
$T_{10}^{13.0} [^\circ C]$	590
$T_{10}^{7.6} [^\circ C]$	683
$c_p [J/(g \cdot K)]$	0.690
$\lambda [W/(m \cdot K)]$	0.960
$\rho [g/cm^3]$	3.37
$E [10^3 N/mm^2]$	93
$\mu$	0.262
$K [10^{-6} mm^2/N]$	2.82
$HK_{0.1/20}$	550
<b>HG</b>	4
<b>CR</b>	1
<b>FR</b>	0
<b>SR</b>	2
<b>AR</b>	1
<b>PR</b>	1

Temperature Coefficients of Refractive Index						
[ $^\circ C$ ]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/ -20	-0.7	1.2	3.9	-3.0	-1.2	1.3
+20/ +40	-0.8	1.5	4.8	-2.3	0.0	3.1
+60/ +80	-0.8	1.8	5.4	-2.0	0.6	4.1