

<b>D-K9</b>	<b>516641</b>	$n_d = 1.51633$	$v_d = 64.06$	$n_F - n_C = 0.008060$
		$n_e = 1.51825$	$v_e = 63.87$	$n_F - n_C = 0.008114$

Refractive Indices			Relative Partial Dispersion		Chemical Properties (grade)		Internal Transmittance		
	$\lambda$ (nm)	$n_\lambda$					$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
$n_{2325}$	2325.42	1.48801	$P_{d,C}$	0.3089	RC (S)	1	2400	0.878	0.771
$n_{1970}$	1970.09	1.49383	$P_{e,d}$	0.2382	RA (S)	1	2200	0.939	0.882
$n_{1530}$	1529.58	1.50003	$P_{g,F}$	0.5347	$D_W$	1	2000	0.985	0.970
$n_{1129}$	1128.64	1.50516	$P'_{d,c}$	0.2576	$D_A$	1	1800	0.995	0.990
$n_{1064}$	1064.00	1.50603	$P'_{e,d}$	0.2366	$R_{OH}(S)$	2	1600	0.999	0.998
$n_t$	1013.98	1.50673	$P'_{g,F}$	0.4745	RP (S)	1	1400	0.999	0.998
$n_s$	852.11	1.50929			CR		1200	0.999	0.998
$n_{A'}$	768.19	1.51094	<b>Deviation of Relative Partial Dispersions</b> $\Delta P_{F,e}$ -0.0020 $\Delta P_{g,F}$ -0.0025 $\Delta P_{C,t}$ 0.0316 $\Delta P_{C,s}$ 0.0104		<b>Expansion Coefficient</b> $\alpha (\times 10^{-7}/K)$ $^{\circ}C$ $\alpha$ -50/-40    49 -40/-30    49 -30/-20    50 -20/-10    51 -10/0    53 0/10    54 10/20    55 20/30    56 30/40    57 40/50    58 50/60    59 60/70    60 70/80    61 80/90    61 90/100    61 100/110    64 110/120    65 120/130    66 130/140    66 140/150    68 150/160    69		1060	0.999	0.998
$n_f$	706.52	1.51241					1000	0.999	0.998
$n_C$	656.27	1.51384					950	0.999	0.998
$n_{C'}$	643.85	1.51424					900	0.999	0.998
$n_{He-Ne}$	632.80	1.51461					850	0.999	0.998
$n_D$	589.29	1.51625	800	0.999	0.998				
$n_d$	587.56	1.51633	750	0.999	0.998				
$n_e$	546.07	1.51825	700	0.999	0.998				
$n_F$	486.13	1.52190	650	0.999	0.998				
$n_{F'}$	479.99	1.52236	600	0.999	0.998				
$n_g$	435.84	1.52621	550	0.999	0.998				
$n_h$	404.66	1.52976	500	0.999	0.998				
$n_i$	365.01	1.53574	480	0.999	0.998				
			460	0.999	0.998				
			440	0.999	0.998				
			420	0.999	0.998				
			400	0.999	0.998				
			390	0.998	0.997				
			380	0.997	0.996				
			370	0.996	0.995				
			360	0.993	0.987				
			350	0.987	0.976				
			340	0.973	0.950				
			330	0.947	0.898				
			320	0.891	0.794				
			310	0.774	0.598				
			300	0.556	0.308				
			290	0.256	0.066				
			280						

Constants of Dispersion Formula	
$A_0$	2.27095299E+00
$A_1$	-1.08648469E-02
$A_2$	1.05786491E-02
$A_3$	1.54454636E-04
$A_4$	5.64088446E-06
$A_5$	-4.70999004E-07

Density	Solarization
$\rho$ (g/cm <sup>3</sup> )	2.39
	$\Delta\lambda$ (%)
	-1.4

Thermal Properties	
$T_g$ (°C)	500
$T_s$ (°C)	560
$T_{10}^{14.5}$ (°C)	450
$T_{10}^{13}$ (°C)	465
$\alpha_{-50/80^{\circ}C}$ (10 <sup>-7</sup> /K)	55
$\alpha_{100/300^{\circ}C}$ (10 <sup>-7</sup> /K)	70
$\lambda$ (W/(m K))	1.31
$\beta_d$	55

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative ( $\times 10^{-6} / ^{\circ}C$ )									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.5	3.6	3.9
-40 ~ -20	2.7	2.8	2.9	3.1	3.1	3.3	3.4	3.6	3.7	4.0
-20 ~ 0	2.7	2.9	3.1	3.2	3.3	3.3	3.4	3.7	3.7	4.1
0 ~ 20	2.8	3.0	3.2	3.3	3.3	3.3	3.5	3.7	3.8	4.2
20 ~ 40	2.9	3.1	3.2	3.4	3.5	3.5	3.6	3.7	3.9	4.2
40 ~ 60	2.9	3.2	3.2	3.4	3.5	3.6	3.6	3.8	4.0	4.3
60 ~ 80	2.9	3.3	3.4	3.5	3.6	3.6	3.7	3.8	4.0	4.4
80 ~ 100	3.0	3.3	3.5	3.6	3.6	3.7	3.7	3.9	4.0	4.6
100 ~ 120	3.0	3.3	3.5	3.7	3.7	3.8	3.9	4.0	4.0	4.8
120 ~ 140	3.1	3.4	3.5	3.7	3.8	3.9	4.0	4.1	4.2	4.9
140 ~ 160	3.1	3.4	3.7	3.9	3.9	4.0	4.2	4.2	4.3	5.1

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	330/280
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	320/280

Constants of dn/dt		
$D_0$	$D_1$	$D_2$
3.06E-06	1.56E-08	-3.00E-11
$E_0$	$E_1$	$\lambda_{TK}$
4.56E-07	3.40E-10	2.15E-01