

ZF7L		805255	n _d = 1.80518		v _d = 25.46		n _F − n _C = 0.031620							
			n _e = 1.81265		v _e = 25.27		n _{F'} − n _{C'} = 0.032161							
Refractive Indices			Relative Partial Dispersion		Chemical Properties (grade)		Internal Transmittance							
	λ (nm)	n _λ					λ (nm)	τ5mm	τ10mm					
n ₂₃₂₅	2325.42	1.75298					2400	0.960	0.922					
n ₁₉₇₀	1970.09	1.75808					2200	0.977	0.955					
n ₁₅₃₀	1529.58	1.76445					2000	0.990	0.980					
n ₁₁₂₉	1128.64	1.77203					1800	0.998	0.996					
n ₁₀₆₄	1064.00	1.77373	P' _{d,c'}	0.2382	D _A	4	1600	0.998	0.996					
n _t	1013.98	1.77521	P' _{e,d}	0.2323	R _{OH} (S)	2	1400	0.998	0.996					
n _s	852.11	1.78159	P' _{g,F'}	0.5398	RP (S)	2	1200	0.998	0.996					
n _{A'}	768.19	1.78645	Deviation of Relative Partial Dispersions		Expansion Coefficient α (×10 ⁻⁷ /K)		1060	0.998	0.996					
n _r	706.52	1.79118					1000	0.998	0.996					
n _C	656.27	1.79611					950	0.998	0.996					
n _{C'}	643.85	1.79752					900	0.998	0.996					
n _{He-Ne}	632.80	1.79885					850	0.998	0.996					
n _D	589.29	1.80491	Thermal Properties		-40/-30	74	800	0.998	0.996					
n _d	587.56	1.80518	T _g (°C)		440	-30/-20	75	750	0.998	0.996				
n _e	546.07	1.81265	T _s (°C)		472	-20/-10	76	700	0.998	0.996				
n _F	486.13	1.82773	T ₁₀ ^{14.5} (°C)		413	-10/0	77	650	0.998	0.996				
n _{F'}	479.99	1.82968	T ₁₀ ¹³ (°C)		422	0/10	78	600	0.998	0.996				
n _g	435.84	1.84704	α _{-50/80°C} (10 ⁻⁷ /K)		78	10/20	79	550	0.998	0.996				
n _h	404.66	1.86436	α _{100/300°C} (10 ⁻⁷ /K)		90	20/30	79	500	0.998	0.996				
n _i	365.01	1.89719	λ (W/(m·K))		1.08	30/40	80	480	0.996	0.992				
Constants of Dispersion Formula						40/50	80	460	0.994	0.989				
						50/60	81	440	0.989	0.976				
						60/70	81	420	0.972	0.930				
						70/80	82	400	0.924	0.839				
						80/90	82	390	0.870	0.742				
			Mechanical Properties			90/100	83	380	0.771	0.582				
			HK (10 ⁷ Pa)		351	100/110	84	370	0.576	0.325				
			F _A		251	110/120	84	360	0.251	0.064				
			E (GPa)		58.9	120/130	85	350						
			G (GPa)		22.1	130/140	86	340						
			μ		0.240	140/150	87	330						
			σ _b (MPa)		54	150/160	88	320						
			B (10 ⁻¹² /Pa)		0.76		310							
							300							
							290							
										280				
Range of Temperature (°C)	Temperature Coefficients of Refractive Index										Coloration Code			
	dn/dt relative (×10 ⁻⁶ / °C)													
	t	s	C	C'	He-Ne	d	e	F	F'	g	λ ₈₀ (λ ₇₀)/λ ₅		425/360	
	-60~-40	6.8	8.0	8.9	9.0	9.1	9.6	10.4	12.6	12.7	15.0	Coloration of Internal Transmittance		
	-40~-20	6.9	8.1	9.0	9.1	9.2	9.8	10.8	12.9	13.0	15.6	λτ ₈₀ /λτ ₅		389/359
	-20~0	7.1	8.2	9.3	9.3	9.4	10.2	11.1	13.3	13.4	16.1			
	0~20	7.3	8.4	9.5	9.5	9.6	10.4	11.5	13.7	13.7	16.6			
	20~40	7.4	8.5	9.7	9.7	9.8	10.5	11.6	14.0	14.1	17.0			
	40~60	7.8	8.8	9.9	9.9	10.1	11.0	11.9	14.4	14.5	17.4			
	60~80	8.2	9.1	10.3	10.3	10.5	11.3	12.3	14.9	15.0	18.2	Constants of dn/dt		
80~100	8.3	9.2	10.5	10.5	10.6	11.7	12.6	15.4	15.4	18.7	D ₀	D ₁	D ₂	
100~120	8.4	9.4	10.7	10.8	10.9	12.1	13.0	15.8	15.8	19.0	8.09E-06	1.60E-08	-2.15E-11	
120~140	8.5	9.5	11.0	11.1	11.2	12.4	13.2	16.0	16.0	19.4	E ₀	E ₁	λ _{TK}	
140~160	8.8	9.7	11.3	11.4	11.5	12.7	13.6	16.3	16.4	19.9	1.62E-06	1.37E-09	2.86E-01	