

Refractive Index n_d	1.51633	Abbe Number v_d	64.1	Dispersion $n_F - n_C$	0.00805
	1.516330		64.14		0.008050
Refractive Index n_e	1.518251	Abbe Number v_e	63.93	Dispersion $n_F - n_C$	0.008107

Refractive Indices		
	λ (μm)	
n_{2325}	2.32542	1.48899
n_{1970}	1.97009	1.49462
n_{1530}	1.52958	1.50050
n_{1129}	1.12864	1.50536
n_t	1.01398	1.50686
n_s	0.85211	1.50935
n_A	0.76819	1.51097
n_r	0.70652	1.51243
n_C	0.65627	1.51306
n_C	0.64385	1.51425
He-Ne	0.6328	1.51462
D	0.58929	1.51626
d	0.58756	1.51633
e	0.54607	1.51825
F	0.48613	1.52191
F	0.47999	1.52236
He-Cd	0.44157	1.52564
g	0.435835	1.52621
h	0.404656	1.52977
i	0.365015	1.53578

Deviation of Relative Partial Dispersions Δ from "Normal"	
$\Delta\theta_{C,t}$	0.0211
$\Delta\theta_{C,A}$	0.0044
$\Delta\theta_{g,d}$	-0.0037
$\Delta\theta_{g,F}$	-0.0024
$\Delta\theta_{i,g}$	0.0010

Constants of Dispersion Formula	
A_1	1.15150190
A_2	$1.18583612 \cdot 10^{-1}$
A_3	1.26301359
B_1	$1.05984130 \cdot 10^{-2}$
B_2	$-1.18225190 \cdot 10^{-2}$
B_3	$1.29617662 \cdot 10^{-2}$

Other Properties		
Bubble Quality Group	B	1
Specific Gravity	d	2.52
Price Ratio		10
Remarks		

Range of temperature (°C)	Temperature Coefficients of Refractive Index dn/dt relative (10 ⁻⁷ /°C)						
	t	C'	He-Ne	D	e	F	g
-40 ~ -20	2.1	2.3	2.3	2.4	2.5	2.7	3.0
-20 ~ 0	2.1	2.4	2.4	2.5	2.6	2.8	3.1
0 ~ 20	2.2	2.5	2.5	2.6	2.7	3.0	3.2
20 ~ 40	2.2	2.6	2.6	2.7	2.8	3.1	3.3
40 ~ 60	2.3	2.6	2.7	2.8	2.9	3.2	3.5
60 ~ 80	2.4	2.7	2.7	2.9	3.0	3.3	3.6

Partial Dispersions	
$n_C - n_t$	0.006993
$n_C - n_A$	0.002882
$n_d - n_C$	0.002475
$n_e - n_C$	0.004396
$n_g - n_d$	0.009884
$n_g - n_F$	0.004309
$n_h - n_g$	0.003554
$n_i - n_g$	0.009571
$n_C - n_i$	0.007389
$n_e - n_C$	0.004000
$n_F - n_e$	0.004107
$n_i - n_F$	0.013427

Thermal Properties		
Strain Point (°C)	StP	532
Annealing Point (°C)	AP	563
Transformation Temperature (°C)	Tg	576
Yield Point (°C)	At	625
Softening Point (°C)	SP	718
Expansion Coefficients (10 ⁻⁷ /°C)	α	72 (-30 ~ +10°C) 86 (+100 ~ +300°C)
Thermal Conductivity (W/m·K)	k	1.130

Mechanical Properties		
Young's Modulus (10 ⁹ N/m ²)	E	800
Rigidity Modulus (10 ⁹ N/m ²)	G	332
Poisson's Ratio	σ	0.205
Knoop Hardness	Hk	570 [6]
Abrasion	Aa	94
Photoelastic Constant (mu/m·N)	β	2.79

Chemical Properties		
Water Resistance (Powder) Group	RW(P)	2
Acid Resistance (Powder) Group	RA(P)	1
Weathering Resistance (Surface) Group	W(S)	1-2
Acid Resistance (Surface) Group	SR	1.0
Phosphate Resistance	PR	2.0

Relative Partial Dispersions	
$\theta_{C,t}$	0.8687
$\theta_{C,A}$	0.3580
$\theta_{d,C}$	0.3075
$\theta_{e,C}$	0.5461
$\theta_{g,d}$	1.2278
$\theta_{g,F}$	0.5353
$\theta_{h,g}$	0.4415
$\theta_{i,g}$	1.1889
$\theta'_{C,t}$	0.9114
$\theta'_{e,C}$	0.4934
$\theta'_{F,e}$	0.5066
$\theta'_{i,F}$	1.5562

Coloring	
$\lambda_{80} / \lambda_{.5}$	33 / 29

Internal Transmittance	
λ (nm)	τ 10 mm
280	
290	0.080
300	0.310
310	0.580
320	0.770
330	0.880
340	0.940
350	0.968
360	0.984
370	0.991
380	0.991
390	0.996
400	0.997
420	0.996
440	0.995
460	0.995
480	0.996
500	0.996
550	0.998
600	0.997
650	0.997
700	0.996
800	0.998
900	0.997
1000	0.996
1200	0.995
1400	0.982
1600	0.991
1800	0.980
2000	0.961
2200	0.890
2400	0.850