

PBM2Y

Code(d) **620363**

Code(e) **624360**

Refractive Index n_d	1.62004 1.620041	Abbe Number v_d	36.3 36.27	Dispersion n_F-n_C	0.01709 0.017095
Refractive Index n_e	1.624093	Abbe Number v_e	36.01	Dispersion $n_F-n_{C'}$	0.017330

Refractive Indices		
$\lambda(\mu\text{m})$		
n_{2325}	2.32542	1.58471
n_{1970}	1.97009	1.58959
n_{1530}	1.52958	1.59510
n_{1129}	1.12864	1.60067
n_t	1.01398	1.60275
n_s	0.85211	1.60668
$n_{A'}$	0.76819	1.60953
n_r	0.70652	1.61225
n_C	0.65627	1.61502
$n_{C'}$	0.64385	1.61581
$n_{\text{He-Ne}}$	0.6328	1.61655
n_D	0.58929	1.61989
n_d	0.58756	1.62004
n_e	0.54607	1.62409
n_F	0.48613	1.63211
$n_{F'}$	0.47999	1.63314
$n_{\text{He-Cd}}$	0.44157	1.64072
n_g	0.435835	1.64207
n_h	0.404656	1.65071
n_i	0.365015	1.66635
n_{334}	0.334148	1.68482
n_{326}	0.326106	1.69111

Partial Dispersions	
n_C-n_t	0.012265
$n_C-n_{A'}$	0.005485
n_d-n_C	0.005022
n_e-n_C	0.009074
n_g-n_d	0.022030
n_g-n_F	0.009957
n_h-n_g	0.008640
n_i-n_g	0.024279
n_C-n_t	0.013052
$n_e-n_{C'}$	0.008287
$n_{F'-n_e}$	0.009043
$n_i-n_{F'}$	0.033214

Relative Partial Dispersions	
$\theta_{C,t}$	0.7175
$\theta_{C,A'}$	0.3209
$\theta_{d,C}$	0.2938
$\theta_{e,C}$	0.5308
$\theta_{g,d}$	1.2887
$\theta_{g,F}$	0.5825
$\theta_{h,g}$	0.5054
$\theta_{i,g}$	1.4202
$\theta'_{C,t}$	0.7531
$\theta'_{e,C'}$	0.4782
$\theta'_{F',e}$	0.5218
$\theta'_{i,F}$	1.9166

Thermal Properties	
Strain Point StP (°C)	385
Annealing Point AP (°C)	418
Transformation Temperature Tg (°C)	436
Yield Point At (°C)	470
Softening Point SP (°C)	580
Expansion Coefficients (-30~+70°C)	86
α (10 ⁻⁷ /°C) (+100~+300°C)	97
Thermal Conductivity k (W/m-K)	0.814

Coloring			
λ_{80}	35	λ_5	32

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_{10\text{mm}}$	$\tau_{25\text{mm}}$
240		
250		
260		
270		
280		
290		
300		
310		
320	0.04	
330	0.44	0.12
340	0.81	0.59
350	0.944	0.86
360	0.980	0.951
365	0.986	0.965
370	0.991	0.978
380	0.995	0.987
390	0.996	0.991
400	0.997	0.993
420	0.998	0.995
440	0.998	0.995
460	0.998	0.996
480	0.998	0.996
500	0.999	0.997
550	0.999	0.998
600	0.999	0.998
650	0.999	0.997
700	0.999	0.998
800	0.999	0.998
900	0.999	0.998
1000	0.998	0.995
1200	0.998	0.995
1400	0.996	0.990
1600	0.994	0.985
1800	0.980	0.951
2000	0.962	0.908
2200	0.921	0.81
2400	0.89	0.75

Deviation of Relative Dispersions $\Delta\theta$ from "Normal"	
$\Delta \theta_{C,t}$	0.0007
$\Delta \theta_{C,A'}$	0.0011
$\Delta \theta_{g,d}$	-0.0007
$\Delta \theta_{g,F}$	-0.0003
$\Delta \theta_{i,g}$	-0.0011

Constants of Dispersion Formula *1	
A_1	1.39446503E+00
A_2	1.59230985E-01
A_3	2.45470216E-01
B_1	1.10571872E-02
B_2	5.07194882E-02
B_3	3.14440142E+01

*1 By using these contents, refractive indices for any wavelength between 326 and 1129nm can be calculated. When calculateing refractive indices for any wavelength between 1129 and 2325nm, please refer to us.

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

Other Properties	
Bubble Quality Group B	
Specific Gravity d	3.61
Remarks	

Temperature Coefficients of Refractive Index								
Range of Temperature (°C)	dn/dt relative (10 ⁻⁶ /°C)							
	t	C'	He-Ne	D	e	F'	g	i
-40~20	2.1	2.9	3.0	3.3	3.6	4.4	5.3	8.2
-20~ 0	2.3	3.1	3.1	3.5	3.8	4.6	5.5	8.6
0~20	2.5	3.3	3.3	3.6	4.0	4.8	5.8	8.9
20~40	2.5	3.4	3.5	3.8	4.2	5.1	6.0	9.3
40~60	2.7	3.6	3.7	4.0	4.4	5.3	6.3	9.6
60~80	2.9	3.8	3.8	4.2	4.6	5.5	6.6	10.0