S-BSM 2

Code(d) **607568**

Code(e) **610565**

Refractive Index	n_d	**1.60738**	Abbe Number	v_d	**56.8**	Dispersion	n_F-n_C	**0.01069**
		1.607379			56.81			0.010691
Refractive Index	n_e	1.609927	Abbe Number	v_e	56.53	Dispersion	n_F'-$n_{C'}$	0.010790

Refractive Indicies		
λ(μm)		
n_{2325}	2.32542	1.57874
n_{1970}	1.97009	1.58374
n_{1530}	1.52958	1.58913
n_{1129}	1.12864	1.59398
n_t	1.01398	1.59561
n_s	0.85211	1.59849
$n_{A'}$	0.76819	1.60048
n_r	0.70652	1.60231
n_C	0.65627	1.60414
$n_{C'}$	0.64385	1.60466
$n_{He\text{-}Ne}$	0.6328	1.60514
n_D	0.58929	1.60728
n_d	0.58756	1.60738
n_e	0.54607	1.60993
n_F	0.48613	1.61483
$n_{F'}$	0.47999	1.61545
$n_{He\text{-}Cd}$	0.44157	1.61992
n_g	0.435835	1.62070
n_h	0.404656	1.62558
n_i	0.365015	1.63394

Deviation of Relative Dispersions Δθfrom "Normal"	
$\Delta\theta_{C,t}$	-0.0150
$\Delta\theta_{C,A'}$	-0.0022
$\Delta\theta_{g,d}$	-0.0010
$\Delta\theta_{g,F}$	-0.0013
$\Delta\theta_{i,g}$	-0.0105

Constants of Dispersion Formula	
A_1	8.67168676E-01
A_2	6.72848343E-01
A_3	1.18456107E+00
B_1	3.69311003E-03
B_2	1.81652804E-02
B_3	1.32376147E+02

Other Properties	
Bubble Quality Group B	
Specific Gravity d	3.53
Remarks	

Partial Dispersions	
n_C-n_t	0.008534
n_C-$n_{A'}$	0.003662
n_d-n_C	0.003235
n_e-n_C	0.005783
n_g-n_d	0.013318
n_g-n_F	0.005862
n_h-n_g	0.004885
n_i-n_g	0.013244
n_C-n_t	0.009048
n_e-$n_{C'}$	0.005269
n_F-n_e	0.005521
n_i-$n_{F'}$	0.018493

Thermal Properties		
Strain Point StP (℃)		612
Annealing Point AP (℃)		643
Transformation Temperature Tg (℃)		654
Yield Point At (℃)		690
Softening Point SP (℃)		778
Expansion Coefficients α (10^{-7}/℃)	(-30~+70℃)	65
	(+100~+300℃)	74
Thermal Conductivity k (W/m·K)		0.802

Mechanical Properties		
Young's Modulus E (10^8N/m^2)	780	
Rigidity Modulus G (10^8N/m^2)	309	
Poisson's Ratio σ	0.264	
Knoop Hardness Hk[Class]	560	6
Abrasion Aa	133	
Photoelastic Constant β (nm/cm/10^5Pa)		2.26

Chemical Properties	
Water Resistance(Powder) Group RW(P)	1
Acid Resistance(Powder) Group RA(P)	4
Weathering Resistance(Surface) Group W(S)	
Acid Resistance(Surface) Group SR	5.2
Phosphate Resistance PR	2.2

Temperature Coefficients of Refractive Index							
Range of Temperature (℃)	dn/dt relative (10^{-6}/℃)						
	t	C'	He-Ne	D	e	F'	g
-40~20	3.1	3.5	3.6	3.7	3.8	4.2	4.5
-20~ 0	3.2	3.6	3.7	3.8	3.9	4.3	4.7
0~20	3.3	3.7	3.7	3.9	4.0	4.4	4.8
20~40	3.4	3.8	3.8	4.0	4.1	4.5	4.9
40~60	3.4	3.9	3.9	4.1	4.3	4.7	5.1
60~80	3.5	4.0	4.0	4.2	4.4	4.8	5.2

Relative Partial Dispersions	
$\theta_{C,t}$	0.7982
$\theta_{C,A'}$	0.3425
$\theta_{d,C}$	0.3026
$\theta_{e,C}$	0.5409
$\theta_{g,d}$	1.2457
$\theta_{g,F}$	0.5483
$\theta_{h,g}$	0.4569
$\theta_{i,g}$	1.2388
$\theta'_{C',t}$	0.8386
$\theta'_{e,C'}$	0.4883
$\theta'_{F',e}$	0.5117
$\theta'_{i,F}$	1.7139

Coloring			
λ_{80}	35	λ_5	30
λ_{70}			

Internal Transmittance	
λ(nm)	τ10mm
280	
290	
300	
310	0.04
320	0.27
330	0.57
340	0.77
350	0.88
360	0.941
370	0.967
380	0.981
390	0.987
400	0.991
420	0.991
440	0.990
460	0.991
480	0.993
500	0.995
550	0.997
600	0.997
650	0.996
700	0.998
800	0.999
900	0.998
1000	0.998
1200	0.998
1400	0.994
1600	0.997
1800	0.992
2000	0.984
2200	0.951
2400	0.89