

**P-SF68**  
**005210.619**

$n_d = 2.00520$	$v_d = 21.00$	$n_F - n_C = 0.047867$
$n_e = 2.01643$	$v_e = 20.82$	$n_F' - n_C' = 0.048826$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.93381
$n_{1970.1}$	1970.1	1.93968
$n_{1529.6}$	1529.6	1.94732
$n_{1060.0}$	1060.0	1.95970
$n_t$	1014.0	1.96160
$n_s$	852.1	1.97063
$n_f$	706.5	1.98449
$n_C$	656.3	1.99171
$n_{C'}$	643.8	1.99380
$n_{632.8}$	632.8	1.99576
$n_D$	589.3	2.00479
$n_d$	587.6	2.00520
$n_e$	546.1	2.01643
$n_F$	486.1	2.03958
$n_{F'}$	480.0	2.04262
$n_g$	435.8	2.07018
$n_h$	404.7	
$n_i$	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula	
$B_1$	2.33300670
$B_2$	0.452961396
$B_3$	1.251723390
$C_1$	0.01688384190
$C_2$	0.0716086325
$C_3$	118.7074790

Constants of Formula for $dn/dT$	
$D_0$	1.55E-05
$D_1$	2.30E-08
$D_2$	-3.46E-11
$E_0$	2.76E-06
$E_1$	2.93E-09
$\lambda_{TK}$ [ $\mu\text{m}$ ]	0.297

Temperature Coefficients of the Refractive Index						
[ $^{\circ}\text{C}$ ]	$\Delta n_{rel}/\Delta T$ [ $10^{-6}/\text{K}$ ]			$\Delta n_{abs}/\Delta T$ [ $10^{-6}/\text{K}$ ]		
	1060.0	e	g	1060.0	e	g
-40/-20	13.7	21.5	32.3	11.1	18.8	29.5
+20/+40	15.2	24.1	36.5	13.5	22.3	34.6
+60/+80	16.2	25.8	39.1	15.4	25.3	39.2

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ [10mm]	$\tau_i$ [25mm]
2500	0.790	0.560
2325	0.910	0.780
1970	0.976	0.940
1530	0.996	0.990
1060	0.999	0.998
700	0.997	0.993
660	0.996	0.989
620	0.994	0.985
580	0.989	0.973
546	0.976	0.940
500	0.910	0.780
460	0.760	0.500
436	0.570	0.250
420	0.300	0.050
405	0.040	0.000
400	0.010	
390	0.000	
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code	
$\lambda_{80} / \lambda_5$	49/41*

Remarks
suitable for precision molding

Relative Partial Dispersion	
$P_{s,t}$	0.1885
$P_{C,s}$	0.4406
$P_{d,C}$	0.2817
$P_{e,d}$	0.2346
$P_{g,F}$	0.6392
$P_{i,h}$	
$P'_{s,t}$	0.1848
$P'_{C,s}$	0.4746
$P'_{d,C'}$	0.2336
$P'_{e,d}$	0.2300
$P'_{g,F'}$	0.5644
$P'_{i,h}$	

Deviation of Relative Partial Dispersion $\Delta P$ from the normal line	
$\Delta P_{C,t}$	-0.0156
$\Delta P_{C,s}$	-0.0113
$\Delta P_{F,e}$	0.0063
$\Delta P_{g,F}$	0.0308
$\Delta P_{i,g}$	

Other Properties	
$\alpha_{-30/+70^{\circ}\text{C}}$ [ $10^{-6}/\text{K}$ ]	8.4
$\alpha_{+20/+300^{\circ}\text{C}}$ [ $10^{-6}/\text{K}$ ]	9.7
$T_g$ [ $^{\circ}\text{C}$ ]	428
$T_{10}^{13}$ [ $^{\circ}\text{C}$ ]	430
$T_{10}^{7.6}$ [ $^{\circ}\text{C}$ ]	504
$c_p$ [ $\text{J}/(\text{g}\cdot\text{K})$ ]	0.370
$\lambda$ [ $\text{W}/(\text{m}\cdot\text{K})$ ]	0.650
$AT$ [ $^{\circ}\text{C}$ ]	468
$\rho$ [ $\text{g}/\text{cm}^3$ ]	6.19
$E$ [ $10^3 \text{ N}/\text{mm}^2$ ]	79
$\mu$	0.275
$K$ [ $10^{-6} \text{ mm}^2/\text{N}$ ]	1.61
$HK_{0.1/20}$	404
<b>Abrasion Aa</b>	298
<b>CR</b>	1
<b>FR</b>	5
<b>SR</b>	53.3
<b>AR</b>	1-2.3
<b>PR</b>	2.3
<b>WR-J</b>	1