

**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
$n_r$	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	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.793	0.560
2325	0.905	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	0.905	0.780
460	0.758	0.500
436	0.574	0.250
420	0.302	0.050
405	0.036	
400	0.007	
390		
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

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 Dispersions $\Delta P$ 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
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	2.3330067
$B_2$	0.452961396
$B_3$	1.25172339
$C_1$	0.0168838419
$C_2$	0.0716086325
$C_3$	118.707479

Constants of Dispersion $dn/dT$	
$D_0$	$1.55 \cdot 10^{-5}$
$D_1$	$2.30 \cdot 10^{-8}$
$D_2$	$-3.46 \cdot 10^{-11}$
$E_0$	$2.76 \cdot 10^{-6}$
$E_1$	$2.93 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.297

Color Code	
$\lambda_{80}/\lambda_5$	49/41*
(*= $\lambda_{70}/\lambda_5$ )	

Remarks
suitable for precision molding

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	8.4
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	9.7
$T_g [^\circ C]$	428
$T_{10}^{13.0} [^\circ C]$	430
$T_{10}^{7.6} [^\circ C]$	504
$c_p [J/(g \cdot K)]$	0.370
$\lambda [W/(m \cdot K)]$	0.650
$AT [^\circ C]$	468
$\rho [g/cm^3]$	6.19
$E [10^3 N/mm^2]$	79
$\mu$	0.275
$K [10^{-6} mm^2/N]$	1.61
$HK_{0.1/20}$	404
<b>HG</b>	
<b>Abrasion Aa</b>	298
<b>CR</b>	1
<b>FR</b>	5
<b>SR</b>	53.3
<b>AR</b>	2.3
<b>PR</b>	2.3
<b>SR-J</b>	4
<b>WR-J</b>	1

Temperature Coefficients of Refractive Index						
[ $^\circ C$ ]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	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