

**P-LASF50**  
**809405.454**

$n_d = 1.80860$	$v_d = 40.46$	$n_F - n_C = 0.019985$
$n_e = 1.81335$	$v_e = 40.22$	$n_F' - n_C' = 0.020223$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.76261
$n_{1970.1}$	1970.1	1.76975
$n_{1529.6}$	1529.6	1.77759
$n_{1060.0}$	1060.0	1.78657
$n_t$	1014.0	1.78770
$n_s$	852.1	1.79259
$n_f$	706.5	1.79934
$n_C$	656.3	1.80266
$n_{C'}$	643.8	1.80359
$n_{632.8}$	632.8	1.80447
$n_D$	589.3	1.80842
$n_d$	587.6	1.80860
$n_e$	546.1	1.81335
$n_F$	486.1	1.82264
$n_{F'}$	480.0	1.82382
$n_g$	435.8	1.83399
$n_h$	404.7	1.84367
$n_i$	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	
$B_1$	1.84910553
$B_2$	0.329828674
$B_3$	1.304009010
$C_1$	0.00999234757
$C_2$	0.0387437988
$C_3$	95.8967681

Constants of Formula for $dn/dT$	
$D_0$	8.04E-06
$D_1$	1.20E-08
$D_2$	-2.19E-11
$E_0$	8.20E-07
$E_1$	9.08E-10
$\lambda_{TK}$ [ $\mu\text{m}$ ]	0.209

Temperature Coefficients of the Refractive Index						
[°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	6.9	8.5	10.0	4.5	6.0	7.5
+20/+40	7.1	8.9	10.6	5.5	7.3	9.0
+60/+80	7.3	9.2	11.1	6.1	8.0	9.9

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ [10mm]	$\tau_i$ [25mm]
2500	0.530	0.200
2325	0.780	0.530
1970	0.950	0.880
1530	0.992	0.981
1060	0.999	0.998
700	0.998	0.995
660	0.997	0.993
620	0.997	0.992
580	0.997	0.992
546	0.997	0.992
500	0.995	0.987
460	0.990	0.975
436	0.985	0.963
420	0.980	0.950
405	0.971	0.930
400	0.967	0.920
390	0.954	0.890
380	0.930	0.830
370	0.880	0.720
365	0.840	0.650
350	0.660	0.350
334	0.290	0.030
320	0.030	
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code	
$\lambda_{80} / \lambda_5$	39/32

Remarks	
suitable for precision molding	

Relative Partial Dispersion	
$P_{s,t}$	0.2448
$P_{C,s}$	0.5037
$P_{d,C}$	0.2973
$P_{e,d}$	0.2376
$P_{g,F}$	0.5680
$P_{i,h}$	
$P'_{s,t}$	0.2419
$P'_{C,s}$	0.5441
$P'_{d,C'}$	0.2475
$P'_{e,d}$	0.2348
$P'_{g,F'}$	0.5032
$P'_{i,h}$	

Deviation of Relative Partial Dispersion $\Delta P$ from the normal line	
$\Delta P_{C,t}$	0.0116
$\Delta P_{C,s}$	0.0065
$\Delta P_{F,e}$	-0.0020
$\Delta P_{g,F}$	-0.0078
$\Delta P_{i,g}$	

Other Properties	
$\alpha_{-30/+70^\circ\text{C}}$ [ $10^{-6}/K$ ]	5.9
$\alpha_{+20/+300^\circ\text{C}}$ [ $10^{-6}/K$ ]	7.3
$T_g$ [°C]	527
$T_{10}^{13}$ [°C]	526
$T_{10}^{7.6}$ [°C]	660
$c_p$ [J/(g·K)]	0.560
$\lambda$ [W/(m·K)]	0.950
AT [°C]	571
$\rho$ [g/cm <sup>3</sup> ]	4.54
E [ $10^3$ N/mm <sup>2</sup> ]	119
$\mu$	0.298
K [ $10^{-6}$ mm <sup>2</sup> /N]	2.41
HK <sub>0.1/20</sub>	655
Abrasion Aa	62
CR	
FR	
SR	
AR	
PR	
SR-J	3
WR-J	1