

## 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
$n_r$	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	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.525	0.200
2325	0.776	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	0.928	0.830
370	0.877	0.720
365	0.842	0.650
350	0.657	0.350
334	0.292	0.030
320	0.032	
310		
300		
290		
280		
270		
260		
250		

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

Constants of Dispersion Formula	
$B_1$	1.84910553
$B_2$	0.329828674
$B_3$	1.30400901
$C_1$	0.00999234757
$C_2$	0.0387437988
$C_3$	95.8967681

Constants of Dispersion $dn/dT$	
$D_0$	$8.04 \cdot 10^{-6}$
$D_1$	$1.20 \cdot 10^{-8}$
$D_2$	$-2.19 \cdot 10^{-11}$
$E_0$	$8.20 \cdot 10^{-7}$
$E_1$	$9.08 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.209

Color Code	
$\lambda_{80}/\lambda_5$	39/32
(*= $\lambda_{70}/\lambda_5$ )	

Remarks	
suitable for precision molding	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	5.9
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	7.3
$T_g [^\circ C]$	527
$T_{10}^{13.0} [^\circ C]$	526
$T_{10}^{7.6} [^\circ C]$	660
$c_p [J/(g \cdot K)]$	0.560
$\lambda [W/(m \cdot K)]$	0.950
$AT [^\circ C]$	571
$\rho [g/cm^3]$	4.54
$E [10^3 N/mm^2]$	119
$\mu$	0.298
$K [10^{-6} mm^2/N]$	2.41
$HK_{0.1/20}$	655
<b>HG</b>	
<b>Abrasion Aa</b>	62
<b>CR</b>	0
<b>FR</b>	0
<b>SR</b>	0
<b>AR</b>	0
<b>PR</b>	0
<b>SR-J</b>	3
<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	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