

P-SK58A 589612.297

$n_d = 1.58913$	$v_d = 61.15$	$n_F - n_C = 0.009634$
$n_e = 1.59143$	$v_e = 60.93$	$n_{F'} - n_{C'} = 0.009707$

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.55820
$n_{1970.1}$	1970.1	1.56439
$n_{1529.6}$	1529.6	1.57086
$n_{1060.0}$	1060.0	1.57728
n_t	1014.0	1.57799
n_s	852.1	1.58086
n_r	706.5	1.58449
n_C	656.3	1.58618
$n_{C'}$	643.8	1.58665
$n_{632.8}$	632.8	1.58709
n_D	589.3	1.58904
n_d	587.6	1.58913
n_e	546.1	1.59143
n_F	486.1	1.59581
$n_{F'}$	480.0	1.59636
n_g	435.8	1.60100
n_h	404.7	1.60530
n_i	365.0	1.61260
$n_{334.1}$	334.1	1.62045
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance τ_i		
λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.546	0.220
2325	0.746	0.480
1970	0.924	0.820
1530	0.984	0.961
1060	0.996	0.991
700	0.995	0.988
660	0.995	0.988
620	0.996	0.989
580	0.997	0.992
546	0.998	0.994
500	0.997	0.993
460	0.996	0.989
436	0.995	0.987
420	0.994	0.986
405	0.994	0.985
400	0.994	0.984
390	0.991	0.977
380	0.986	0.965
370	0.980	0.950
365	0.971	0.930
350	0.924	0.820
334	0.752	0.490
320	0.364	0.080
310	0.067	
300	0.002	
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2982
$P_{C,s}$	0.5519
$P_{d,C}$	0.3062
$P_{e,d}$	0.2386
$P_{g,F}$	0.5386
$P_{i,h}$	0.7578
$P'_{s,t}$	0.2959
$P'_{C',s}$	0.5963
$P'_{d,C'}$	0.2554
$P'_{e,d}$	0.2368
$P'_{g,F'}$	0.4784
$P'_{i,h}$	0.7521

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"

$\Delta P_{C,t}$	0.0150
$\Delta P_{C,s}$	0.0065
$\Delta P_{F,e}$	-0.0010
$\Delta P_{g,F}$	-0.0023
$\Delta P_{i,g}$	-0.0080

Constants of Dispersion Formula	
B_1	1.3167841
B_2	0.171154756
B_3	1.12501473
C_1	0.00720717498
C_2	0.0245659595
C_3	102.739728

Constants of Dispersion dn/dT	
D_0	$3.16 \cdot 10^{-6}$
D_1	$1.23 \cdot 10^{-8}$
D_2	$-1.08 \cdot 10^{-11}$
E_0	$4.41 \cdot 10^{-7}$
E_1	$3.20 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.176

Color Code	
λ_{80}/λ_5	35/31
(*= λ_{70}/λ_5)	

Remarks
suitable for precision molding

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	6.8
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	8.4
$T_g [^\circ C]$	510
$T_{10}^{13.0} [^\circ C]$	510
$T_{10}^{7.6} [^\circ C]$	608
$c_p [J/(g \cdot K)]$	0.770
$\lambda [W/(m \cdot K)]$	1.020
$AT [^\circ C]$	551
$\rho [g/cm^3]$	2.97
$E [10^3 N/mm^2]$	97
μ	0.245
$K [10^{-6} mm^2/N]$	2.12
$HK_{0.1/20}$	662
HG	
Abrasion Aa	102
CR	0
FR	0
SR	0
AR	0
PR	0
SR-J	4
WR-J	2

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	3.2	3.8	4.4	1.0	1.6	2.2
+20/ +40	3.2	3.8	4.4	1.8	2.4	3.0
+60/ +80	3.3	4.0	4.7	2.2	2.9	3.6