

# Sharp Cut Filter (Colorless)

L-37

Catalog Thickness t = 2.5 mm

Reflection Factor P<sub>r</sub> = 0.903

Diagram-1

Transmittance (T) & Internal Transmittance (τ) units: (%)

λ <sub>nm</sub>	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	
T																.82	12.7	43.3	67.0	79.5	84.7	87.5	88.9	89.7	90.0	
τ																.91	14.1	48.0	74.2	88.0	93.8	96.9	98.5	99.3	99.7	
λ <sub>nm</sub>	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	
T																										
τ																										
λ <sub>nm</sub>	700	710	720	730	740	750	800	850	900	950	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	
T																										
τ																										

Refractive Indices

Symbol	i	h	g	F'	F	e	d	D	C'	C	r	A'	t
λ <sub>nm</sub>	365.0	404.7	435.8	480.0	486.1	546.1	587.6	589.3	643.8	656.3	706.5	768.2	1,014.0
n	1.620	1.607	1.600	1.593	1.592	1.586	1.582	1.582	1.579	1.578	1.576	1.573	1.568

Abbe-Number

$$v_d = \frac{n_d - 1}{n_F - n_C} = 41$$

Color Specifications

	x	y	Y	λ <sub>d</sub>	P <sub>e</sub>
A	.448	.408	90.8	579	1
C	.311	.317	90.7	579	1
D <sub>65</sub>	.314	.330	90.8	580	1

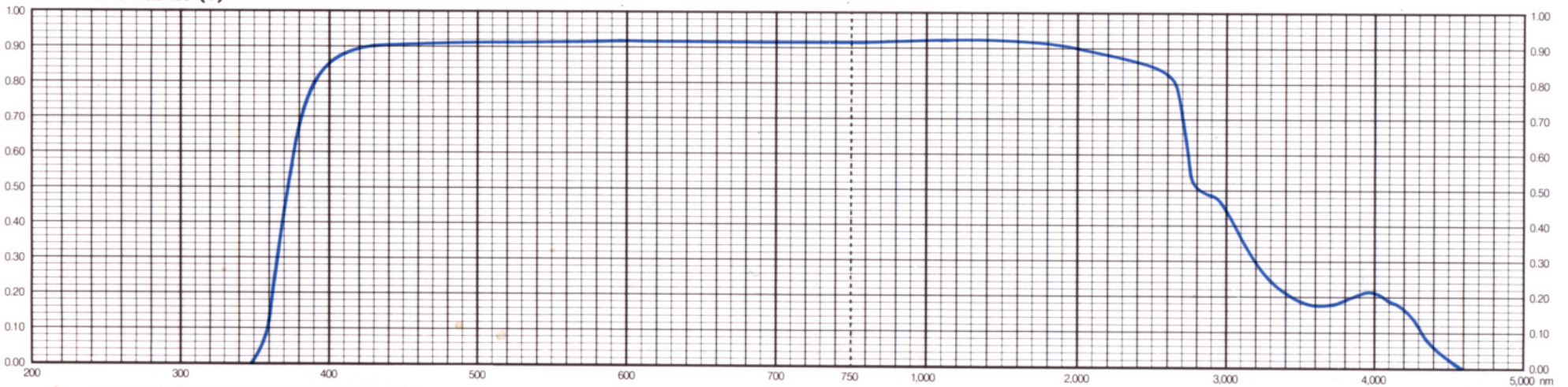
Properties

Chemical		Thermal				Mechanical		Other
D <sub>w</sub>	D <sub>A</sub>	T <sub>g</sub>	T <sub>s</sub>	$\frac{\alpha}{-30/70}$	$\frac{\alpha}{100/300}$	H <sub>K</sub>	F <sub>A</sub>	S
2	1	440	490	94	103	460	170	3.26

Tolerances of Transmittance (T)

Transition Wavelength	Transition Interval	Average High Transmittance
λT(nm)	Δλ(nm)	T <sub>H</sub> (%)
370 ± 5	< 35	> 85

Transmittance (T)



All data are mean values of various melts.