

Infrared Transmitting Filter

IR-85

Catalog Thickness t = 2.5 mm

Reflection Factor $P_r = 0.905$

Diagram-1

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

λ_{nm}	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																										
τ																										
λ_{nm}	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_{nm}	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						$1 \cdot 10^{-3}$.67	38.8	82.8	88.5	89.6	90.4														
τ						$1 \cdot 10^{-3}$.74	42.9	91.5	97.8	99.0	99.9														

Refractive Indices

Symbol	i	h	g	F'	F	e	d	D	C'	C	r	A'	t
λ_{nm}	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							(1.574)						1.562

Abbe-Number

$$V_d = \frac{n_d - 1}{n_F - n_C} =$$

Color Specifications

	x	y	Y	λ_d	P_e
A	—	—	—	—	—
C	—	—	—	—	—
D ₆₅	—	—	—	—	—

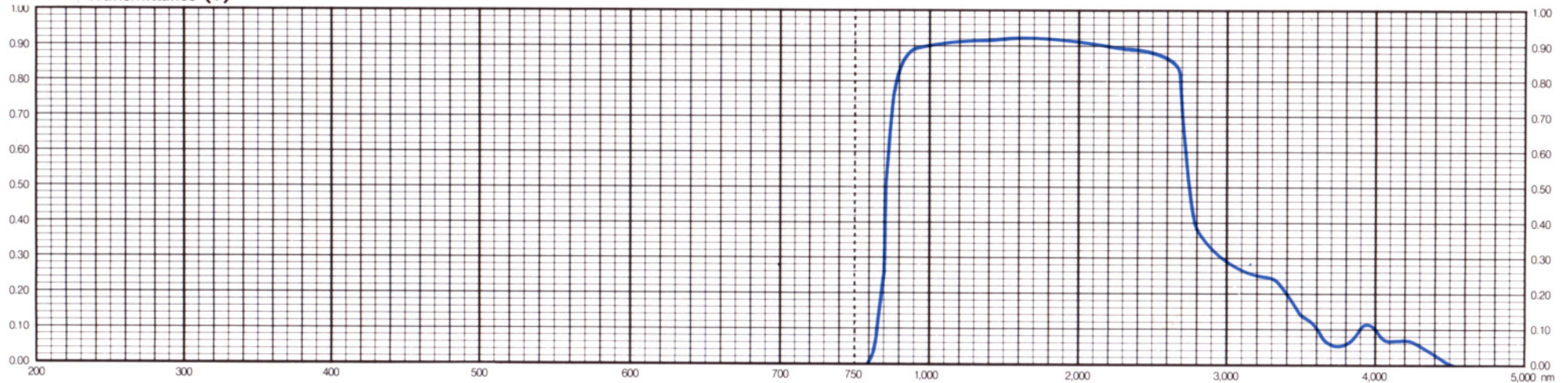
Properties

Chemical		Thermal				Mechanical		Other
D _w	D _A	T _g	T _s	$\frac{\alpha}{-30/70}$	$\frac{\alpha}{100/300}$	H _K	F _A	S
1	4	490	535	92	102	500	150	3.02

Tolerances of Transmittance (T)

Transition Wavelength	Transition Interval
λT (nm)	$\Delta \lambda$ (nm)
850 ± 10	< 60

Transmittance (T)



All data are mean values of various melts.