

Color Compensating Filter (Cyan)

CM-500

Catalog Thickness $t = 1.0$ mm

Reflection Factor $P_i = 0.915$

Diagram-5

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											.50	11.8	36.5	55.7	66.6	72.2	75.4	77.9	80.2	82.0	83.4	84.8	85.7	86.5	87.5
τ											.55	12.9	39.9	60.9	72.8	78.9	82.4	85.1	87.7	89.6	91.1	92.7	93.7	94.5	95.6
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	88.0	88.8	89.1	89.5	89.7	89.9	89.9	89.5	88.8	87.5	85.4	82.1	77.3	68.7	59.0	49.7	41.0	33.4	27.0	21.5	16.4	11.3	7.5	4.8	3.0
τ	96.2	97.0	97.4	97.8	98.0	98.3	98.3	97.8	97.0	95.6	93.3	89.7	84.5	75.1	64.5	54.3	44.8	36.5	29.5	23.5	17.9	12.4	8.2	5.3	3.3
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	1.8	1.0	.56	.31	.17	.10	$8 \cdot 10^{-3}$.08	.2	1.5	5.7	15.0	28.2	42.8	55.5	65.3	72.0	76.5	78.2	78.9	79.3
τ	2.0	1.1	.61	.34	.19	.11	$9 \cdot 10^{-3}$.09	.2	1.6	6.2	16.4	30.8	46.8	60.7	71.4	78.7	83.6	85.5	86.2	86.7

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	1.555	1.549	1.545	1.541	1.541	1.537	1.535	1.535					

Abbe-Number

$$v_d = \frac{nd - 1}{nF - nC} =$$

Color Specifications

	x	y	Y	λ_d	P_e
A	.362	.434	66.7	500	19
C	.252	.310	73.5	490	22
D ₆₅	.254	.325	73.3	491	22

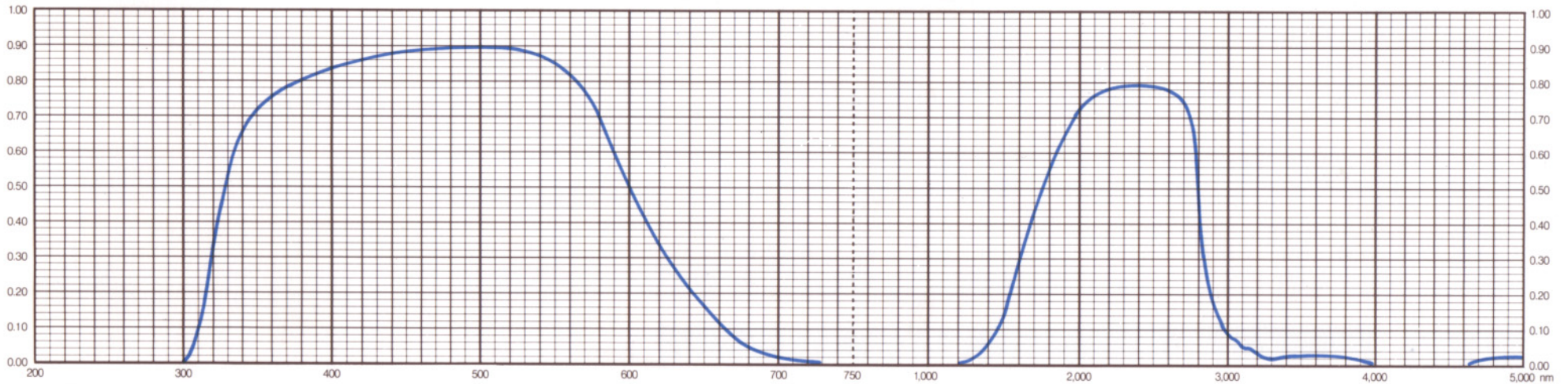
Properties

Chemical		Thermal				Mechanical		Other
D _W	D _A	T _g	T _s	$\alpha_{-30/70}$	$\alpha_{100/300}$	H _K	F _A	S
2	3	400	440	99	119	430	160	2.73

Tolerances of Transmittance (T)

Wavelength for Max. Transmittance	Maximum Transmittance	Transmittance at 600 nm	Transmittance at 700 nm
λT_{max} (nm)	T_{max} (%)	T_{600} (%)	T_{700} (%)
500 ± 5	90 ± 2	49 ± 3	< 2

Transmittance (T)



All data are mean values of various melts.