

Four elementary colours and four intermediate colours		CIE tristimulus values and chromaticity for illuminant C and 2 degree observer					
Hue circle	Miescher/Munsell hue	X _c	Y _c	Z _c	x _c	y _c	
Elementary Red R	08/6.0R-V5	32,53	18,11	5,32	0,5813	0,3236	
red yellow R50J	05/3.7YR-V5	60,31	45,44	5,55	0,5419	0,4083	
Elementary Yellow J	02/8.5Y-V5	70,52	77,82	10,18	0,4449	0,4909	
yellow green J50G	23/9.5GY-V5	25,23	45,15	14,00	0,2990	0,5351	
Green G	20/5.9G-V5	8,51	20,24	16,28	0,1890	0,4495	
green blue G50B	17/8.5BG-V5	8,83	14,56	31,55	0,1607	0,2650	
Blue B	14/5.3PB-V5	11,92	9,35	48,79	0,1701	0,1335	
blue red B50R	11/7.4P-V5	16,15	8,47	30,90	0,2909	0,1526	

JE520-1

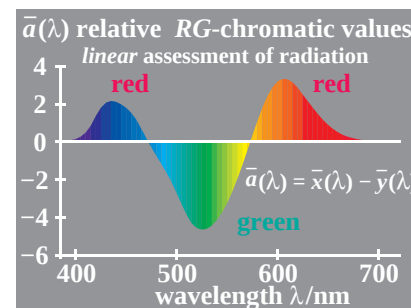
Elementary colour and CIE illuminant		CIELAB data, CIE tristimulus values and CIE chromaticity for the CIE standard illuminant D65 and D50 and the 2 degree observer									
CIE-test colour	Ill.	L*	a*	b*	C* _{ab}	h _{ab}	X	Y	Z	x	y
09, Red R	D65	40,04	58,98	28,32	65,43	25,7	20,64	11,27	4,34	0,5693	0,3110
10, Yellow J		81,30	-2,99	71,82	71,89	92,4	54,89	59,01	12,02	0,4359	0,4686
11, Green G		52,27	-42,40	13,64	44,54	162,2	12,15	20,38	15,34	0,2538	0,4258
12, Blue B		30,52	1,21	-46,35	46,37	271,5	6,24	6,45	27,59	0,1550	0,1601
09, Red R	D50	41,88	62,00	31,82	69,69	27,2	23,31	12,42	3,24	0,5982	0,3188
10, Yellow J		81,97	1,81	71,59	71,61	88,5	58,84	60,24	9,50	0,4576	0,4685
11, Green G		51,62	-41,12	11,52	42,70	164,4	12,10	19,81	11,95	0,2759	0,4515
12, Blue B		29,20	-5,28	-49,34	49,62	263,9	5,25	5,92	21,25	0,1621	0,1825

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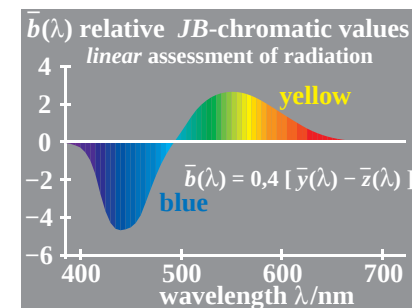
Elementary and intermediate colours					Munsell Notation (Value 5) and dominant wavelength	
Hue	Observer				mean Munsell value and dominant wavelength	correction for Bezold-Brücke effect
	K.R.	G.W.	A.V.	K.M.		
Red R	6.5R 700	5.8R 494c	6.0R 494c	5.8R 494c	6.0R 494c	494c 700 495c
R50J	3.75YR 592	4.2YR 591	3.5YR 593	3.7YR 592	3.7YR 592±1	590±2
Yellow J	7.5Y 575	8.5Y 574	10.0Y 572	10.0Y 572	8.5Y 574±2	572±2
J50G	10GY 542	8.75GY 550	9.0GY 548	0.5G 536	9.5GY 544±8	542±10
Green G	6.0G 502.5	5.0G 504	6.0G 502.5	6.7G 501.5	5.9G 503±2	503±2
G50B	7.5BG 488.5	8.75BG 487.5	8.0BG 488	10.0BG 486.5	8.5BG 488±2	489±2
Blue B	5.6PB 472	5.0PB 474.5	5.1PB 474	5.0PB 474.5	5.3PB 474±2	472±2
B50R	7.5P 558c	7.5P 558c	7.0P 560c	7.5P 558c	7.4P 559c±1	559c±1

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TUB-test chart JE52; colour vision and elementary colours
CIE-test colours, Miescher data, Munsell data



JE521-1



JE521-2

Elementary colour and CIE illuminant		CIELAB data, CIE tristimulus values and CIE chromaticity for the CIE standard illuminants D65 and A and the 2 degree observer									
CIE-test colour	Ill.	L*	a*	b*	C* _{ab}	h _{ab}	X	Y	Z	x	y
09, Red R	D65	40,04	58,98	28,32	65,43	25,7	20,64	11,27	4,34	0,5693	0,3110
10, Yellow J		81,30	-2,99	71,82	71,89	92,4	54,89	59,01	12,02	0,4359	0,4686
11, Green G		52,27	-42,40	13,64	44,54	162,2	12,15	20,38	15,34	0,2538	0,4258
12, Blue B		30,52	1,21	-46,35	46,37	271,5	6,24	6,45	27,59	0,1550	0,1601
09, Red R	A	47,79	61,74	42,56	74,99	34,6	33,54	16,63	1,36	0,6509	0,3227
10, Yellow J		83,82	7,06	70,78	71,13	84,3	73,49	63,71	4,63	0,5181	0,4492
11, Green G		49,00	-35,96	4,34	36,22	173,1	12,80	17,60	5,56	0,3560	0,4893
12, Blue B		25,14	-17,25	-56,25	58,83	253,0	3,60	4,46	9,15	0,2094	0,2591

JE521-3

Elementary colours <i>R, J, G, B</i>	Spectral Reflexion R of CIE-test colours no. 09 to no. 12 in the wavelength range 380nm ... 770nm										
CIE-test colour	R(380nm), R(385nm), ... , R(475nm) R(480nm), R(485nm), ... , R(575nm) R(580nm), R(585nm), ... , R(675nm) R(680nm), R(685nm), ... , R(770nm)										
CIE no. 09, Red R	0,066	0,058	0,052	0,051	0,050	0,048	0,046	0,042	0,038	0,033	
	0,030	0,028	0,028	0,030	0,031	0,032	0,033	0,035	0,041	0,048	
	0,060	0,102	0,190	0,336	0,505	0,641	0,717	0,758	0,781	0,797	
	0,809	0,819	0,828	0,831	0,835	0,836	0,838	0,839	0,839		
CIE no. 10, Yellow J	0,050	0,059	0,066	0,068	0,069	0,072	0,076	0,083	0,095	0,113	
	0,142	0,189	0,262	0,365	0,465	0,546	0,610	0,653	0,678	0,693	
	0,701	0,705	0,706	0,707	0,708	0,710	0,712	0,716	0,720	0,725	
	0,731	0,739	0,746	0,749	0,753	0,755	0,755	0,756	0,758		
CIE no. 11, Green G	0,111	0,127	0,127	0,116	0,108	0,104	0,105	0,110	0,123	0,148	
	0,192	0,252	0,325	0,356	0,346	0,314	0,271	0,227	0,188	0,153	
	0,125	0,106	0,096	0,090	0,085	0,080	0,078	0,078	0,081	0,088	
	0,102	0,125	0,161	0,203	0,242	0,270	0,292	0,310	0,317		
CIE no. 12, Blue B	0,120	0,090	0,076	0,064	0,075	0,123	0,207	0,300	0,346	0,341	
	0,307	0,257	0,204	0,154	0,109	0,075	0,051	0,035	0,025	0,019	
	0,017	0,016	0,016	0,016	0,016	0,018	0,018	0,019	0,023	0,026	
	0,035	0,056	0,097	0,166	0,257	0,354	0,446	0,520	0,577		

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input: *rgb* -> *olv* setrgbcolor*
output: no change compared to input