

**rgb\*<sub>e</sub> and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours**  
 XYZ, xy, YAB, and Lab\* data for relative spacing of elementary hue h<sub>ab</sub> of CIELAB  
 16 step elementary hue circle with intended elementary hues: h<sub>ab</sub> = 25.4, 92.3, 162.2, 271.7 of CIELAB

	X	Y	Z	x	y	A	B	C <sub>AB</sub>	h <sub>AB</sub>	L*	a*	b*	C* <sub>ab</sub>	h <sub>ab</sub>	rgb -> rgb* <sub>e</sub>
R00Y=R	66.0	41.1	20.9	0.515	0.321	26.9	9.5	28.5	19.5	70.3	70.9	33.4	78.4	25.2	1.00 0.00 0.00
R25Y	64.0	41.5	6.4	0.571	0.371	24.5	15.5	29.0	32.3	70.5	65.1	71.4	96.6	47.6	1.00 0.25 0.00
R50Y	62.6	41.7	1.0	0.593	0.396	22.8	17.7	28.9	37.8	70.7	61.2	106.3	122.7	60.0	1.00 0.50 0.00
R75Y	71.1	58.7	0.1	0.546	0.451	15.3	25.5	29.7	59.0	81.1	35.2	137.3	141.7	75.6	1.00 0.75 0.00
Y00G=Y	76.8	83.9	1.3	0.473	0.517	-2.9	36.0	36.1	94.7	93.4	-5.9	141.9	142.0	92.3	1.00 1.00 0.00
Y25G	65.9	89.6	6.7	0.406	0.552	-19.2	36.3	41.1	117.8	95.8	-39.4	113.6	120.3	109.1	0.75 1.00 0.00
Y50G	43.7	79.6	8.1	0.332	0.605	-31.9	31.4	44.7	135.4	91.5	-77.3	101.2	127.3	127.3	0.50 1.00 0.00
Y75G	26.4	67.7	12.4	0.247	0.635	-38.0	24.5	45.2	147.1	85.9	-113.0786	137.7	145.1	145.1	0.25 1.00 0.00
G00B=G	21.8	61.8	31.6	0.189	0.536	-36.9	14.2	39.5	158.8	82.8	-119.5379	125.4	162.3	162.3	0.00 1.00 0.00
G25B	27.8	58.9	81.5	0.165	0.349	-28.1	-6.9	28.9	193.9	81.2	-86.9	-13.9	88.0	189.1	0.00 1.00 0.50
G50B	25.6	45.4	108.70.142	0.252	-17.5	-23.7	29.5	233.5	73.1	-61.3	-46.1	76.7	216.9	216.9	0.00 1.00 1.00
G75B	20.2	29.3	108.40.128	0.185	-7.6	-30.6	31.5	256.0	61.0	-33.4	-66.8	74.7	243.4	243.4	0.00 0.50 1.00
B00R=B	18.4	18.7	107.70.127	0.129	0.6	-34.9	34.9	271.0	50.4	3.3	-84.8	84.9	272.2	272.2	0.00 0.00 1.00
B25R	18.0	8.8	105.20.136	0.067	9.5	-38.2	39.4	284.0	35.7	64.2	-108.51261	300.6	300.6	0.50 0.00 1.00	
B50R	61.7	26.3	99.4	0.329	0.14	36.7	-28.3	46.3	322.3	58.3	112.5	-65.8	130.3	329.6	1.00 0.00 1.00
B75R	71.2	40.6	51.0	0.437	0.249	32.5	-2.6	32.6	355.2	69.9	83.6	-7.1	83.9	355.1	1.00 0.00 0.50

5 step equidistant grey scale with intended lightness: L\* = 0.0, 25.0, 50.0, 75.0, 100.0

	X	Y	Z	x	y	A	B	C <sub>AB</sub>	h <sub>AB</sub>	L*	a*	b*	C* <sub>ab</sub>	h <sub>ab</sub>	rgb -> rgb* <sub>e</sub>
N00W=N0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00 0.00 0.00
N025W	4.1	4.4	4.8	0.312	0.329	0.0	0.0	0.0	77.5	25.0	0.0	0.0	0.0	0.0	0.25 0.25 0.25
N050W	17.5	18.4	20.0	0.312	0.329	0.0	0.0	0.0	55.3	50.0	0.0	0.0	0.0	0.0	0.50 0.50 0.50
N075W	45.8	48.2	52.5	0.312	0.329	0.0	0.0	0.0	21.0	75.0	0.0	0.0	0.0	0.0	0.75 0.75 0.75
N100W=W95.0	100.0	108.8	0.312	0.329	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	1.00 1.00 1.00

gek80-3n, Lab\*, page 1/2

**rgb\*<sub>e</sub> and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours**  
 XYZ, xy, YAB, and Lab\* data for relative spacing of elementary hue h<sub>ab</sub> of CIELAB  
 16 step elementary hue circle with intended elementary hues: h<sub>ab</sub> = 25.4, 92.3, 162.2, 271.7 of CIELAB

	X	Y	Z	x	y	A	B	C <sub>AB</sub>	h <sub>AB</sub>	L*	a*	b*	C* <sub>ab</sub>	h <sub>ab</sub>	rgb -> rgb* <sub>e</sub>
R00Y=R	66.0	41.1	20.9	0.515	0.321	26.9	9.5	28.5	19.5	70.3	70.9	33.4	78.4	25.2	1.00 0.00 0.00
R25Y	64.0	41.5	6.4	0.571	0.371	24.5	15.5	29.0	32.3	70.5	65.1	71.4	96.6	47.6	1.00 0.25 0.00
R50Y	62.6	41.7	1.0	0.593	0.396	22.8	17.7	28.9	37.8	70.7	61.2	106.3	122.7	60.0	1.00 0.50 0.00
R75Y	71.1	58.7	0.1	0.546	0.451	15.3	25.5	29.7	59.0	81.1	35.2	137.3	141.7	75.6	1.00 0.75 0.00
Y00G=Y	76.8	83.9	1.3	0.473	0.517	-2.9	36.0	36.1	94.7	93.4	-5.9	141.9	142.0	92.3	1.00 1.00 0.00
Y25G	65.9	89.6	6.7	0.406	0.552	-19.2	36.3	41.1	117.8	95.8	-39.4	113.6	120.3	109.1	0.75 1.00 0.00
Y50G	43.7	79.6	8.1	0.332	0.605	-31.9	31.4	44.7	135.4	91.5	-77.3	101.2	127.3	127.3	0.50 1.00 0.00
Y75G	26.4	67.7	12.4	0.247	0.635	-38.0	24.5	45.2	147.1	85.9	-113.0786	137.7	145.1	145.1	0.25 1.00 0.00
G00B=G	21.8	61.8	31.6	0.189	0.536	-36.9	14.2	39.5	158.8	82.8	-119.5379	125.4	162.3	162.3	0.00 1.00 0.00
G25B	27.8	58.9	81.5	0.165	0.349	-28.1	-6.9	28.9	193.9	81.2	-86.9	-13.9	88.0	189.1	0.00 1.00 0.50
G50B	25.6	45.4	108.70.142	0.252	-17.5	-23.7	29.5	233.5	73.1	-61.3	-46.1	76.7	216.9	216.9	0.00 1.00 1.00
G75B	20.2	29.3	108.40.128	0.185	-7.6	-30.6	31.5	256.0	61.0	-33.4	-66.8	74.7	243.4	243.4	0.00 0.50 1.00
B00R=B	18.4	18.7	107.70.127	0.129	0.6	-34.9	34.9	271.0	50.4	3.3	-84.8	84.9	272.2	272.2	0.00 0.00 1.00
B25R	18.0	8.8	105.20.136	0.067	9.5	-38.2	39.4	284.0	35.7	64.2	-108.51261	300.6	300.6	0.50 0.00 1.00	
B50R	61.7	26.3	99.4	0.329	0.14	36.7	-28.3	46.3	322.3	58.3	112.5	-65.8	130.3	329.6	1.00 0.00 1.00
B75R	71.2	40.6	51.0	0.437	0.249	32.5	-2.6	32.6	355.2	69.9	83.6	-7.1	83.9	355.1	1.00 0.00 0.50

5 step equidistant grey scale with intended lightness: L\* = 0.0, 25.0, 50.0, 75.0, 100.0

	X	Y	Z	x	y	A	B	C <sub>AB</sub>	h <sub>AB</sub>	L*	a*	b*	C* <sub>ab</sub>	h <sub>ab</sub>	rgb -> rgb* <sub>e</sub>
N00W=N0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00 0.00 0.00
N025W	4.1	4.4	4.8	0.312	0.329	0.0	0.0	0.0	77.5	25.0	0.0	0.0	0.0	0.0	0.25 0.25 0.25
N050W	17.5	18.4	20.0	0.312	0.329	0.0	0.0	0.0	55.3	50.0	0.0	0.0	0.0	0.0	0.50 0.50 0.50
N075W	45.8	48.2	52.5	0.312	0.329	0.0	0.0	0.0	21.0	75.0	0.0	0.0	0.0	0.0	0.75 0.75 0.75
N100W=W95.0	100.0	108.8	0.312	0.329	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	1.00 1.00 1.00

gek80-7n, Lab\*, page 1/2

**rgb\*<sub>e</sub> and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours**  
 XYZ, xy, YAB, and Lab\* data for relative spacing of elementary hue h<sub>ab</sub> of CIELAB  
 16 step elementary hue circle with intended elementary hues: h<sub>ab</sub> = 25.4, 92.3, 162.2, 271.7 of CIELAB

	X	Y	Z	x	y	A	B	C <sub>AB</sub>	h <sub>AB</sub>	L*	a*	b*	C* <sub>ab</sub>	h <sub>ab</sub>	rgb -> rgb* <sub>e</sub>
R00Y=R	66.0	41.1	20.9	0.515	0.321	26.9	9.5	28.5	19.5	70.3	70.9	33.4	78.4	25.2	1.00 0.00 0.00
R25Y	64.0	41.5	6.4	0.571	0.371	24.5	15.5	29.0	32.3	70.5	65.1	71.4	96.6	47.6	1.00 0.25 0.00
R50Y	62.6	41.7	1.0	0.593	0.396	22.8	17.7	28.9	37.8	70.7	61.2	106.3	122.7	60.0	1.00 0.50 0.00
R75Y	71.1	58.7	0.1	0.546	0.451	15.3	25.5	29.7	59.0	81.1	35.2	137.3	141.7	75.6	1.00 0.75 0.00
Y00G=Y	76.8	83.9	1.3	0.473	0.517	-2.9	36.0	36.1	94.7	93.4	-5.9	141.9	142.0	92.3	1.00 1.00 0.00
Y25G	65.9	89.6	6.7	0.406	0.552	-19.2	36.3	41.1	117.8	95.8	-39.4	113.6	120.3	109.1	0.75 1.00 0.00
Y50G	43.7	79.6	8.1	0.332	0.605	-31.9	31.4	44.7	135.4	91.5	-77.3	101.2	127.3	127.3	0.50 1.00 0.00
Y75G	26.4	67.7	12.4	0.247	0.635	-38.0	24.5	45.2	147.1	85.9	-113.0786	137.7	145.1	145.1	0.25 1.00 0.00
G00B=G	21.8	61.8	31.6	0.189	0.536	-36.9	14.2	39.5	158.8	82.8	-119.5379	125.4	162.3	162.3	0.00 1.00 0.00
G25B	27.8	58.9	81.5	0.165	0.349	-28.1	-6.9	28.9	193.9	81.2	-86.9	-13.9	88.0	189.1	0.00 1.00 0.50
G50B	25.6	45.4	108.70.142	0.252	-17.5	-23.7	29.5	233.5	73.1	-61.3	-46.1	76.7	216.9	216.9	0.00 1.00 1.00
G75B	20.2	29.3	108.40.128	0.185	-7.6	-30.6	31.5	256.0	61.0	-33.4	-66.8	74.7	243.4	243.4	0.00 0.50 1.00
B00R=B	18.4	18.7	107.70.127	0.129	0.6	-34.9	34.9	271.0	50.4	3.3	-84.8	84.9	272.2	272.2	0.00 0.00 1.00
B25R	18.0	8.8	105.20.136	0.067	9.5	-38.2	39.4	284.0	35.7	64.2	-108.51261	300.6	300.6	0.50 0.00 1.00	
B50R	61.7	26.3	99.4	0.329	0.14	36.7	-28.3	46.3	322.3	58.3	112.5	-65.8	130.3	329.6	1.00 0.00 1.00
B75R	71.2	40.6	51.0	0.437	0.249	32.5	-2.6	32.6	355.2	69.9	83.6	-7.1	83.9	355.1	1.00 0.00 0.50

5 step equidistant grey scale with intended lightness: L\* = 0.0, 25.0, 50.0, 75.0, 100.0

	X	Y	Z	x	y	A	B	C <sub>AB</sub>	h <sub>AB</sub>	L*	a*	b*	C* <sub>ab</sub>	h <sub>ab</sub>	rgb -> rgb* <sub>e</sub>
N00W=N0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00 0.00 0.00
N025W	4.1	4.4	4.8	0.312	0.329	0.0	0.0	0.0	77.5	25.0	0.0	0.0	0.0	0.0	0.25 0.25 0.25
N050W	17.5	18.4	20.0	0.312	0.329	0.0	0.0	0.0	55.3	50.0	0.0	0.0	0.0	0.0	0.50 0.50 0.50
N075W	45.8	48.2	52.5	0.312	0.329	0.0	0.0	0.0	21.0	75.0	0.0	0.0	0.0	0.0	0.75 0.75 0.75
N100W=W95.0	100.0	108.8	0.312	0.329	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	1.00 1.00 1.00

gek81-3n, YAB, page 1/2

**rgb\*<sub>e</sub> and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours**  
 XYZ, xy,