

Colorimetric data of "Standard Original": Offset Reflective System ORS18 for CIE lightness L*=18 of black

System ORS18

(Reflective CIE, $Y_N=2.52$
and CIELAB zero point)
(CIELAB according
to ISO/IEC 15775)

Color	L*=LAB*a ₁	a*=LAB*a ₂	b*=LAB*a ₃	C*=LAB*a _r	X=XYZ ₁	Y=XYZ ₂	Z=XYZ ₃	x	y	Y/88.59
C	58.62	-30.62	-42.74	52.59	18.74	26.62	68.55	0.1645	0.2337	0.3005
V	25.72	31.45	-44.35	54.38	7.17	4.65	21.41	0.2158	0.14	0.0525
M	48.13	75.2	-6.79	75.51	33.06	16.9	22.01	0.4594	0.2348	0.1907
O	47.94	65.31	52.07	83.53	30.13	16.75	2.68	0.608	0.338	0.189
Y	90.37	-11.15	96.17	96.82	68.07	77.11	9.03	0.4414	0.5	0.8703
L	50.9	-62.96	36.71	72.89	19.18	6.62	0.2523	0.5559	0.2165	0.0284
N	18.01	0.5	-0.46	0.69	2.52	2.81	0.3122	0.3251	0.1	0.0078
W	95.41	-0.98	4.76	4.86	83.69	88.59	89.48	0.3197	0.3384	1.0
N0	0.01	0.84	-1.68	1.89	0.02	0.0	0.12	0.1518	0.0078	0.1
W1	100.0	-1.07	5.06	5.17	94.44	100.0	100.84	0.3198	0.3387	1.288

Colorimetric data: Offset Reflective System ORS18a for CIE lightness L*=18 of black, chroma adapted (a)

System ORS18a

(Reflection adapted
and CIELAB zero point)

Color	L*a=LAB*a ₁	a*=LAB*a ₂	b*=LAB*a ₃	C*=LAB*a _r	X _a =XYZ _{a1}	Y _a =XYZ _{a2}	Z _a =XYZ _{a3}	x _a	y _a	Y _a /88.59
C	58.62	-30.34	-45.01	54.3	18.79	26.62	71.32	0.161	0.228	0.3005
V	25.72	31.1	-44.4	54.22	7.14	4.65	21.44	0.2148	0.14	0.0525
M	48.13	75.28	-8.36	75.74	33.08	16.9	22.9	0.4539	0.2319	0.1907
O	47.94	65.39	50.52	82.63	30.15	16.75	2.9	0.6054	0.3363	0.189
Y	90.37	-10.26	91.75	92.32	68.47	77.11	10.48	0.4388	0.4941	0.8703
L	50.9	-62.83	34.96	71.91	8.72	19.18	7.07	0.2494	0.5484	0.2165
N	18.01	0.0	0.0	0.0	2.4	2.52	2.74	0.3127	0.329	0.0284
W	95.41	0.0	0.0	0.0	84.21	88.59	96.48	0.3127	0.329	1.0
N0	0.01	0.0	0.0	0.01	0.0	0.0	0.0	0.2505	0.3104	0.0
W1	100.0	0.0	0.0	0.01	95.05	100.0	108.92	0.3127	0.329	1.288

Calculated colorimetric data: Offset Luminous Systems OLSxxa for CIE lightness L*=xx=00, 18 of black, chroma adapted (a)

System OLS00a

(Display reflection
Yr=0.0)

Color	L*a=LAB*a ₁	a*=LAB*a ₂	b*=LAB*a ₃	C*=LAB*a _r	X _a =XYZ _{a1}	Y _a =XYZ _{a2}	Z _a =XYZ _{a3}	x _a	y _a	Y _a /88.59
C	56.88	-33.11	-47.41	57.84	16.88 (=16.88+0.0)	24.8 (=24.8+0.0)	70.58 (=70.58+0.0)	0.1504	0.221	0.28
V	16.48	45.84	-56.22	72.54	4.88 (=4.88+0.0)	2.19 (=2.19+0.0)	19.24 (=19.24+0.0)	0.1854	0.0834	0.0248
M	45.36	81.85	-9.29	82.38	31.58 (=31.58+0.0)	14.8 (=14.8+0.0)	20.75 (=20.75+0.0)	0.4705	0.204	0.167
O	45.14	71.37	75.54	103.92	28.57 (=28.57+0.0)	14.64 (=14.64+0.0)	0.16 (=0.16+0.0)	0.6587	0.3376	0.1653
L	90.22	10.6	99.51	100.07	68.01 (=68.01+0.0)	76.77 (=76.77+0.0)	7.96 (=7.96+0.0)	0.4453	0.5026	0.8665
N	48.45	-73.19	42.21	84.5	6.51 (=6.51+0.0)	17.15 (=17.15+0.0)	4.45 (=4.45+0.0)	0.2316	0.61	0.1936
W	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)	0.2789	0.2934	0.0
W	95.41	0.0	0.0	0.0	84.21 (=84.21+0.0)	88.59 (=88.59+0.0)	96.48 (=96.48+0.0)	0.3127	0.329	1.0
N0	0.0	0.0	0.0	0.0	-2.45 (= -2.45+0.0)	-2.58 (= -2.58+0.0)	-2.81 (= -2.81+0.0)	0.3127	0.329	-0.0292
W1	100.13	0.0	0.0	0.01	95.37 (=95.37+0.0)	100.33 (=100.33+0.0)	109.28 (=109.28+0.0)	0.3127	0.329	1.1325

System OLS18a

(Display reflection
Yr=2.52)

Color	L*a=LAB*a ₁	a*=LAB*a ₂	b*=LAB*a ₃	C*=LAB*a _r	X _a =XYZ _{a1}	Y _a =XYZ _{a2}	Z _a =XYZ _{a3}	x _a	y _a	Y _a /88.59
C	58.62	-30.34	-45.01	54.3	18.79 (=16.4+2.4)	26.62 (=24.1+2.52)	71.32 (=68.57+2.74)	0.161	0.228	0.3005
V	25.72	31.1	-44.4	54.22	7.14 (=4.74+2.4)	4.65 (=2.13+2.52)	21.44 (=18.69+2.74)	0.2148	0.14	0.0525
M	48.13	75.28	-8.36	75.74	33.08 (=30.68+2.4)	16.9 (=14.38+2.52)	22.9 (=20.16+2.74)	0.4539	0.2319	0.1907
O	47.94	65.39	50.52	82.63	30.15 (=27.75+2.4)	16.75 (=14.23+2.52)	2.9 (=0.16+2.74)	0.6054	0.3363	0.189
Y	90.37	-10.26	91.75	92.32	68.47 (=66.08+2.4)	77.11 (=74.59+2.52)	10.48 (=7.73+2.74)	0.4388	0.4941	0.8703
L	50.9	-62.83	34.96	71.91	8.72 (=6.33+2.4)	19.18 (=16.66+2.52)	7.07 (=4.33+2.74)	0.2494	0.5484	0.2165
N	18.01	0.0	0.0	0.0	2.4 (=0.0+2.4)	2.52 (=0.0+2.52)	2.74 (=0.0+2.74)	0.3127	0.329	0.0284
W	95.41	0.0	0.0	0.0	84.21 (=81.81+2.4)	88.59 (=86.07+2.52)	96.48 (=93.73+2.74)	0.3127	0.329	1.0
N0	0.01	0.0	0.0	0.01	0.0 (= -2.38+2.4)	0.0 (= -2.51+2.52)	0.0 (= -2.73+2.74)	0.2505	0.3105	0.0
W1	100.0	0.0	0.0	0.01	95.05 (=92.65+2.4)	100.0 (=97.48+2.52)	108.92 (=106.17+2.74)	0.3127	0.329	1.288

LE460-7N, Colorimetric data of Offset Reflective Systems ORS18, ORS18a and Offset Luminous Systems OLS00a, OLS18a, chroma adapted (a)

BAM-test chart no. LE46; colorimetric coordinates
ORS18/18a and Offset Luminous Systems OLS00a, 18a

input: cmy0* setcmkcolor
output: no change compared to input

Colorimetric data of "Standard Original": Offset Reflective System ORS18 for CIE lightness $L^*=18$ of black

System ORS18	Color	$L^*=LAB^*_{18}$	$a^*=LAB^*_{18}$	$b^*=LAB^*_{18}$	$C^*=LAB^*_{18}$	$X=XYZ_{18}$	$Y=XYZ_{18}$	$Z=XYZ_{18}$	x	y	Y/88.59
(Reflective CIE, $Y_N=2.52$ and CIELAB zero point)	C	58.62	-30.62	-42.74	52.59	18.74	26.62	68.55	0.1645	0.2337	0.3005
(CIELAB according to ISO/IEC 15775)	V	25.72	31.45	-44.35	54.38	7.17	4.65	21.41	0.2158	0.14	0.0525
	M	48.13	75.2	-6.79	75.51	33.06	16.9	22.01	0.4594	0.2348	0.1907
	O	47.94	65.31	52.07	83.53	30.13	16.75	2.68	0.608	0.338	0.189
	Y	90.37	-11.15	96.17	96.82	68.07	77.11	9.03	0.4414	0.5	0.8703
	L	50.9	-62.96	36.71	72.89	8.71	19.18	6.62	0.2523	0.5559	0.2165
	N	18.01	0.5	-0.46	0.69	2.42	2.52	2.81	0.3122	0.3251	0.0284
	W	95.41	-0.98	4.76	4.86	83.69	88.59	89.48	0.3197	0.3384	1.0
	N0	0.01	0.84	-1.68	1.89	0.02	0.0	0.12	0.1518	0.0078	0.0
	W1	100.0	-1.07	5.06	5.17	94.44	100.0	100.84	0.3198	0.3387	1.1288

Colorimetric data: Offset Reflective System ORS18a for CIE lightness $L^*=18$ of black, chroma adapted (a)

System ORS18a	Color	$L^*_a=LAB^*_{18a}$	$a^*_a=LAB^*_{18a}$	$b^*_a=LAB^*_{18a}$	$C^*_a=LAB^*_{18a}$	$X_a=XYZ_{18a}$	$Y_a=XYZ_{18a}$	$Z_a=XYZ_{18a}$	x_a	y_a	$Y_a/88.59$
(Reflection adapted and CIELAB zero point)	C	58.62	-30.34	-45.01	54.3	18.79	26.62	71.32	0.161	0.228	0.3005
	V	25.72	31.1	-44.4	54.22	7.14	4.65	21.44	0.2148	0.14	0.0525
	M	48.13	75.28	-8.36	75.74	33.08	16.9	22.9	0.4539	0.2319	0.1907
	O	47.94	65.39	50.52	82.63	30.15	16.75	2.9	0.6054	0.3363	0.189
	Y	90.37	-92.32	91.75	91.75	68.47	77.11	10.48	0.4388	0.4941	0.8703
	L	50.9	-62.83	34.96	71.91	8.72	19.18	7.07	0.2494	0.5484	0.2165
	N	18.01	0.0	0.0	0.0	2.4	2.52	2.74	0.3127	0.329	0.0284
	W	95.41	0.0	0.0	0.0	84.21	88.59	96.48	0.3127	0.329	1.0
	N0	0.01	0.0	0.0	0.01	0.0	0.0	0.0	0.2505	0.3104	0.0
	W1	100.0	0.0	0.0	0.01	95.05	100.0	108.92	0.3127	0.329	1.1288

Calculated colorimetric data: Offset Luminous Systems OLSxx for CIE lightness $L^*=xx=00$, 18 of black

System OLS00	Color	$L^*=LAB^*_{18}$	$a^*=LAB^*_{18}$	$b^*=LAB^*_{18}$	$C^*=LAB^*_{18}$	$X=XYZ_{18}$	$Y=XYZ_{18}$	$Z=XYZ_{18}$	x	y	Y/88.59
(Display reflection $Y_r=0.0$)	C	56.88	-33.36	-45.25	56.23	16.83 (=16.83+0.0)	24.8 (=24.8+0.0)	67.97 (=67.97+0.0)	0.1536	0.2263	0.28
	V	16.48	46.37	-56.79	73.32	4.92 (=4.92+0.0)	2.19 (=2.19+0.0)	19.54 (=19.54+0.0)	0.1846	0.0823	0.0248
	M	45.36	81.82	-7.91	82.2	31.58 (=31.58+0.0)	14.8 (=14.8+0.0)	20.01 (=20.01+0.0)	0.4757	0.2229	0.167
	O	45.14	71.35	76.9	104.9	28.56 (=28.56+0.0)	14.64 (=14.64+0.0)	0.06 (=0.06+0.0)	0.6601	0.3384	0.1653
	Y	90.22	-11.49	103.92	104.55	67.61 (=67.61+0.0)	6.77 (=6.77+0.0)	44.73	0.5079	0.8665	0.5709
	L	48.45	-73.28	43.8	85.38	6.5 (=6.5+0.0)	17.15 (=17.15+0.0)	4.15 (=4.15+0.0)	0.2339	0.6168	0.1936
	N	0.0	0.85	-1.68	1.89	0.02 (=0.02+0.0)	0.0 (=0.0+0.0)	0.12 (=0.12+0.0)	0.15	0.0019	0.0
	W	95.41	-0.98	4.76	4.86	83.69 (=83.69+0.0)	88.59 (=88.59+0.0)	89.48 (=89.48+0.0)	0.3197	0.3384	1.0
	N0	0.0	0.85	-1.68	1.89	0.02 (=0.02+0.0)	0.0 (=0.0+0.0)	0.12 (=0.12+0.0)	0.149	0.0	0.0
	W1	100.13	-1.07	5.07	5.18	94.75 (=94.75+0.0)	100.33 (=100.33+0.0)	101.17 (=101.17+0.0)	0.3198	0.3387	1.1325

System OLS18	Color	$L^*=LAB^*_{18}$	$a^*=LAB^*_{18}$	$b^*=LAB^*_{18}$	$C^*=LAB^*_{18}$	$X=XYZ_{18}$	$Y=XYZ_{18}$	$Z=XYZ_{18}$	x	y	Y/88.59
(Display reflection $Y_r=2.52$)	C	58.62	-30.62	-42.74	52.59	18.74 (=16.34+2.4)	26.62 (=24.1+2.52)	68.55 (=65.81+2.74)	0.1645	0.2337	0.3005
	V	25.72	31.45	-44.35	54.38	7.17 (=4.78+2.4)	4.65 (=2.13+2.52)	21.41 (=18.66+2.74)	0.2158	0.14	0.0525
	M	48.13	75.2	-6.79	75.51	33.06 (=30.66+2.4)	16.9 (=14.38+2.52)	22.01 (=19.26+2.74)	0.4594	0.2348	0.1907
	O	47.94	65.31	52.07	83.53	30.13 (=27.73+2.4)	16.75 (=14.23+2.52)	2.68 (=0.05+2.74)	0.608	0.338	0.189
	Y	90.37	-11.15	96.17	96.82	68.07 (=65.67+2.4)	77.11 (=74.59+2.52)	9.03 (=6.29+2.74)	0.4414	0.5	0.8703
	L	50.9	-62.96	36.71	72.89	8.71 (=6.31+2.4)	19.18 (=16.66+2.52)	6.62 (=3.87+2.74)	0.2523	0.5559	0.2165
	N	18.01	0.5	-0.46	0.69	2.42 (=0.02+2.4)	2.52 (=0.0+2.52)	2.81 (=0.07+2.74)	0.3122	0.3251	0.0284
	W	95.41	-0.98	4.76	4.86	83.69 (=81.29+2.4)	88.59 (=86.07+2.52)	89.48 (=86.74+2.74)	0.3197	0.3384	1.0
	N0	0.01	0.84	-1.68	1.89	0.02 (=0.0+2.4)	0.0 (=0.0+2.52)	0.12 (=0.0+2.74)	0.1517	0.0078	0.0
	W1	100.0	-1.07	5.06	5.17	94.44 (=92.04+2.4)	100.0 (=97.48+2.52)	100.84 (=98.1+2.74)	0.3198	0.3387	1.1288

LE460-7N, Colorimetric data of Offset Reflective Systems ORS18, ORS18a and Offset Luminous Systems OLS00, OLS18

BAM-test chart no. LE46; colorimetric coordinates
ORS18/18a and Offset Luminous Systems OLS00, 18

input: cmy0* setcmycolor
output: no change compared to input