

*Job Name* FOGRA39 - MK3 - Eye1 - EBV-ZZ  
*Messdatei* FOGRA39 - MK3 - Eye1 - EBV-ZZ-074  
*Referenzdatei* FOGRA39L.txt  
*Datum u. Zeit* Mo. Dez 21 01:21:30 2009  
*Messgerät* GretagMacbeth EyeOne  
*Messunterlage* Substrat  
*Lichtart/Betrachter* D50 / 2  
*Kunde* Art&Form Reichwein  
*Drucker* Epson Stylus Pro 9880  
*Bedruckstoff* Grapp semimatt 230g/m<sup>2</sup>  
*Druckfarbe / Tinte* Epson UltraChrome K3 8c mit Vivid Magenta und Photoblack  
*Rasterverfahren* 4pass single  
*Auflösung* 720dpi  
*Bearbeiter* Thomas Richard  
*Unterschrift* \_\_\_\_\_

*Notizen*

Prüfdruckkontrolle mit Ugra/Fogra Medienkeil 3.0

Referenz: Fogra39L.txt

Standardtoleranzen der Ugra/Fogra inkl. Delta H Bewertung (Toleranzmodell 2007).

*Information*

Heilmann Imagebroschüre 6-7

	Kriterium	Toleranz Standard	Toleranz Empfohlen	Ergebnis
	Mittelwert $\Delta E^*_{ab}$ = 1.12	3.0	1.5	OK
	Maximalwert $\Delta E^*_{ab}$ = 2.78 (B6)	6.0	3.0	OK
	Bedruckstoff Max. $\Delta E^*_{ab}$ = 0.87 (C21)	3.0	1.0	OK
	Primärfarben Max. $\Delta E^*_{ab}$ = 2.07 (A11)	5.0	2.5	OK
	Primärfarben Max. $\Delta H$ = 0.82 (A1)	2.5	2.0	OK
	Buntgrau G10-G100 Mittelwert $\Delta E^*_{ab}$ = 0.89	1.5	---	OK
	Buntgrau G10-G100 Maximum $\Delta E^*_{ab}$ = 1.28 (G60)	2.0	---	OK
	Buntgrau G10-G100 Mittelwert $\Delta H$ = 0.19	1.5	1.2	OK

**Der Prüfdruck ist innerhalb der Standardtoleranzen (Ugra/Fogra).**

**Der Prüfdruck ist innerhalb der strengeren firmeninternen Toleranzen.**

ID	Name	Target				Referenz			Messwerte			Farbdifferenz					
		C	M	Y	K	L*	a*	b*	L*	a*	b*	$\Delta E^*_{ab}$	$\Delta L^*$	$\Delta a^*$	$\Delta b^*$	$\Delta C^*$	$\Delta H^*$
1	A1	100	0	0	0	55.0	-37.0	-50.0	54.3	-35.8	-49.8	1.4	-0.7	1.1	0.2	-0.8	0.8
2	A2	70	0	0	0	66.9	-24.7	-37.1	65.9	-25.3	-37.2	1.1	-0.9	-0.5	-0.1	0.4	0.4
3	A3	40	0	0	0	79.7	-12.5	-21.8	78.9	-12.7	-21.9	0.9	-0.9	-0.2	-0.1	0.2	0.1
4	A6	0	100	0	0	48.0	74.0	-3.0	48.4	72.2	-2.3	2.0	0.4	-1.9	0.7	-1.9	0.7
5	A7	0	70	0	0	60.8	50.6	-6.7	60.2	50.0	-6.9	0.9	-0.7	-0.6	-0.1	-0.6	0.2
6	A8	0	40	0	0	76.4	25.8	-6.9	75.4	25.8	-7.0	1.0	-1.0	-0.0	-0.1	0.0	0.1
7	A11	0	0	100	0	89.0	-5.0	93.0	88.4	-5.1	91.0	2.1	-0.6	-0.1	-2.0	-2.0	0.2
8	A12	0	0	70	0	90.3	-4.7	62.6	89.7	-4.7	60.2	2.5	-0.7	-0.0	-2.4	-2.4	0.2
9	A13	0	0	40	0	92.2	-3.5	31.1	91.2	-3.6	30.2	1.4	-1.0	-0.1	-1.0	-1.0	0.2
10	C6	20	70	70	0	53.1	37.7	28.9	52.5	37.2	27.9	1.3	-0.6	-0.5	-1.0	-1.0	0.6
11	C7	40	70	70	20	41.5	22.7	16.8	40.9	22.5	17.8	1.2	-0.6	-0.2	1.0	0.5	0.9
12	C8	40	100	100	20	31.9	40.0	24.0	31.7	39.0	23.9	1.0	-0.2	-0.9	-0.0	-0.8	0.5
13	C9	40	100	40	20	32.5	44.5	-1.8	32.5	43.5	-1.5	1.1	-0.1	-1.0	0.3	-1.0	0.3
14	C10	40	40	100	20	51.3	1.3	44.5	50.8	1.1	44.3	0.5	-0.4	-0.2	-0.2	-0.2	0.2
15	C11	100	40	100	20	34.6	-36.4	13.9	33.8	-37.2	15.5	2.0	-0.8	-0.8	1.6	1.4	1.2
16	C12	100	40	40	20	36.0	-26.2	-20.9	35.4	-26.4	-20.8	0.6	-0.5	-0.2	0.1	0.1	0.2
17	C13	100	100	40	20	20.9	9.6	-23.6	20.3	9.0	-24.1	0.9	-0.6	-0.6	-0.4	0.2	0.7
18	B1	100	100	0	0	24.0	22.0	-46.0	23.6	22.0	-45.6	0.5	-0.3	-0.0	0.4	-0.3	0.1
19	B2	70	70	0	0	40.9	17.9	-36.6	39.8	18.6	-37.2	1.4	-1.0	0.7	-0.7	0.9	0.4
20	B3	40	40	0	0	63.7	10.3	-23.8	63.1	9.8	-23.8	0.8	-0.6	-0.5	-0.1	-0.1	0.5
21	B6	0	100	100	0	47.0	68.0	48.0	46.9	66.9	45.5	2.8	-0.1	-1.1	-2.5	-2.3	1.5
22	B7	0	70	70	0	58.5	47.1	37.9	57.8	46.9	37.5	0.8	-0.7	-0.2	-0.4	-0.4	0.2
23	B8	0	40	40	0	74.2	22.9	21.4	73.6	22.7	20.4	1.2	-0.6	-0.2	-1.0	-0.8	0.6
24	B11	100	0	100	0	50.0	-65.0	27.0	49.1	-64.2	25.0	2.3	-0.9	0.9	-2.0	-1.5	1.5
25	B12	70	0	70	0	62.1	-39.8	21.0	61.6	-38.8	19.3	2.1	-0.5	1.0	-1.8	-1.7	1.1
26	B13	40	0	40	0	77.0	-19.1	11.0	76.7	-18.9	10.4	0.7	-0.3	0.2	-0.6	-0.4	0.5
27	C14	10	40	40	0	71.2	18.9	17.2	70.3	19.1	16.0	1.6	-0.9	0.2	-1.2	-0.7	1.1
28	C15	0	40	100	0	71.2	22.1	73.1	70.8	21.7	70.8	2.4	-0.5	-0.4	-2.3	-2.3	0.2
29	C16	0	100	40	0	47.7	71.2	16.2	47.9	69.7	16.8	1.6	0.2	-1.5	0.5	-1.4	0.9
30	C17	40	100	0	0	38.0	55.4	-20.9	37.8	54.3	-20.3	1.3	-0.2	-1.1	0.6	-1.2	0.2
31	C18	40	0	100	0	73.7	-22.8	67.6	72.9	-22.9	66.4	1.4	-0.8	-0.1	-1.1	-1.0	0.4
32	C19	100	0	40	0	52.3	-52.3	-20.1	51.0	-51.4	-21.2	1.9	-1.3	0.9	-1.0	-0.5	1.3
33	C20	100	40	0	0	43.3	-17.0	-48.6	42.3	-16.6	-48.7	1.2	-1.1	0.4	-0.1	-0.0	0.4
34	C21	0	0	0	0	95.0	0.0	-2.0	94.2	-0.1	-2.1	0.9	-0.9	-0.1	-0.1	0.1	0.1
35	K10	0	0	0	10	89.0	0.0	-1.9	88.0	-0.3	-1.9	1.0	-1.0	-0.3	-0.1	0.1	0.3
36	K20	0	0	0	20	82.8	0.0	-1.7	82.0	-0.1	-2.0	0.9	-0.8	-0.1	-0.3	0.3	0.1
37	K40	0	0	0	40	69.3	0.0	-1.4	68.8	-0.4	-1.5	0.6	-0.4	-0.4	-0.1	0.2	0.4
38	K60	0	0	0	60	54.1	0.0	-1.0	53.1	-0.3	-1.0	1.0	-1.0	-0.3	0.0	0.0	0.3
39	K80	0	0	0	80	36.6	0.0	-0.5	36.2	0.1	-1.0	0.7	-0.4	0.1	-0.5	0.5	0.1
40	K100	0	0	0	100	16.0	0.0	0.0	15.5	-0.2	0.0	0.6	-0.5	-0.2	0.0	0.2	0.0
41	G10	10	6	6	0	88.5	-0.4	-3.1	88.0	-0.6	-3.5	0.7	-0.6	-0.3	-0.4	0.4	0.2
42	G20	20	12	12	0	81.9	-0.9	-4.1	81.1	-0.9	-3.8	0.9	-0.8	0.0	0.3	-0.3	0.1
43	G40	40	27	27	0	67.7	-2.0	-4.4	67.0	-1.8	-3.9	0.9	-0.6	0.2	0.5	-0.6	0.0
44	G60	60	45	45	0	52.2	-2.5	-3.5	51.2	-3.2	-3.8	1.3	-1.0	-0.7	-0.3	0.7	0.4
45	G80	80	65	65	0	37.5	-3.9	-3.2	36.4	-4.0	-2.9	1.1	-1.0	-0.1	0.2	-0.0	0.2
46	G100	100	85	85	0	26.3	-6.8	-3.4	25.9	-6.5	-3.5	0.5	-0.4	0.3	-0.1	-0.3	0.2
47	A4	20	0	0	0	87.7	-5.8	-11.8	87.1	-5.9	-11.9	0.6	-0.6	-0.1	-0.1	0.1	0.0
48	A5	10	0	0	0	91.5	-3.0	-7.0	90.9	-3.0	-7.1	0.6	-0.6	0.0	-0.1	0.1	0.1
49	A9	0	20	0	0	86.2	12.0	-5.2	85.5	11.6	-5.7	0.9	-0.7	-0.4	-0.5	-0.2	0.6
50	A10	0	10	0	0	90.7	5.9	-3.9	89.8	5.7	-4.2	0.9	-0.9	-0.2	-0.3	0.1	0.4
51	A14	0	0	20	0	93.6	-1.6	13.3	92.8	-1.6	12.4	1.2	-0.8	0.0	-0.9	-0.9	0.1
52	A15	0	0	10	0	94.3	-0.9	5.4	93.4	-1.1	5.7	1.0	-1.0	-0.2	0.3	0.3	0.1
53	A22	0	100	0	100	10.4	13.9	1.4	10.9	12.3	0.8	1.8	0.5	-1.7	-0.6	-1.7	0.4
54	A23	0	70	70	60	33.4	25.4	20.9	32.8	25.1	20.4	0.8	-0.6	-0.3	-0.4	-0.5	0.2
55	A24	0	0	70	80	34.4	-3.3	22.3	33.6	-3.4	21.8	0.9	-0.8	-0.1	-0.5	-0.5	0.2
56	B4	20	20	0	0	79.4	5.1	-13.6	79.0	4.9	-13.7	0.5	-0.4	-0.2	-0.0	-0.0	0.2
57	B5	10	10	0	0	87.2	2.6	-8.1	86.6	2.7	-8.3	0.6	-0.6	0.1	-0.1	0.1	0.0
58	B9	0	20	20	0	85.0	10.0	9.8	84.7	9.3	9.1	1.1	-0.3	-0.7	-0.7	-1.0	0.0
59	B10	0	10	10	0	90.0	4.8	3.7	89.4	4.7	3.2	0.8	-0.6	-0.0	-0.5	-0.3	0.4
60	B14	20	0	20	0	86.3	-8.4	4.2	85.7	-8.3	3.5	0.9	-0.6	0.1	-0.7	-0.3	0.6
61	B15	10	0	10	0	90.8	-4.2	0.9	90.0	-4.2	1.1	0.8	-0.8	-0.1	0.2	0.1	0.2
62	B22	100	0	0	100	10.4	-8.2	-10.2	10.1	-7.7	-9.6	0.9	-0.3	0.5	0.7	-0.9	0.0
63	B23	20	100	70	60	24.3	32.7	13.1	24.6	31.6	12.8	1.2	0.3	-1.1	-0.3	-1.1	0.1
64	B24	70	0	70	80	24.7	-17.0	7.5	23.6	-16.9	7.6	1.1	-1.1	0.1	0.0	-0.1	0.1
65	C1	100	100	100	0	23.0	0.0	0.0	22.6	-0.7	0.3	0.8	-0.4	-0.7	0.3	0.7	0.0

ID	Name	Target				Referenz			Messwerte			Farbdifferenz					
		C	M	Y	K	L*	a*	b*	L*	a*	b*	$\Delta E^*_{ab}$	$\Delta L^*$	$\Delta a^*$	$\Delta b^*$	$\Delta C^*$	$\Delta H^*$
66	C2	70	70	70	0	38.5	6.6	3.9	37.8	6.0	3.9	0.9	-0.8	-0.6	0.0	-0.5	0.3
67	C3	40	40	40	0	61.5	5.4	3.8	61.1	5.5	3.6	0.5	-0.5	0.1	-0.1	-0.0	0.2
68	C4	20	20	20	0	78.1	2.9	0.9	77.8	2.4	0.5	0.7	-0.3	-0.5	-0.5	-0.6	0.3
69	C5	10	10	10	0	86.6	1.5	-0.7	86.0	1.4	-0.8	0.6	-0.6	-0.1	-0.1	-0.0	0.1
70	C22	0	0	100	100	15.7	-3.1	11.7	14.8	-3.6	11.8	1.1	-0.9	-0.6	0.1	0.2	0.5
71	C23	0	70	0	60	34.7	28.5	-4.0	33.3	27.9	-3.8	1.5	-1.4	-0.6	0.2	-0.6	0.1
72	C24	70	0	0	80	25.8	-11.0	-14.4	25.1	-11.2	-14.4	0.8	-0.8	-0.2	-0.1	0.1	0.1