

TEST REPORT

DEPARTMENT: Graphic Arts

LABORATORY: Graphic Arts

TEST

- A) Colorimetric evaluation of Offset inks according to the standard ISO 2846-1:2006.
- B) Transparency evaluation of Offset inks according to the standard ISO 2846-1:2006.

APPLICANT

Company: MARTINEZ AYALA, S.A.
Address: C° JUAN TERESA, S/N.
City: TOTANA
Zip Code. 30850
Province: Murcia
Telephone. 968418030
Fax: 968423205

STARTING DATE: 06/05/08
ENDING DATE: 15/05/08

N of Attachments: 0



SAMPLE IDENTIFICATION

Description:

Four metal cans containing Cyan, Magenta, Yellow and Black inks.
Apparently inks are homogeneous and in good condition.

The cans have a label in which can be read:

- In Cyan Ink Can:

PRINTING INKS
TINTAS PARA ARTES GRAFICAS
MARTINEZ AYALA
CODE: A2801B003 OFFSET
PROCESS CYAN ECOGLOSS
KGS: 1 LOTE/BATCH: 68828

- In Magenta Ink Can:

PRINTING INKS
TINTAS PARA ARTES GRAFICAS
MARTINEZ AYALA
CODE: A2801R002 OFFSET
PROCESS MAGENTA ECOGLOSS
KGS: 1 LOTE/BATCH: 68082

- In Yellow Ink Can:

PRINTING INKS
TINTAS PARA ARTES GRAFICAS
MARTINEZ AYALA
CODE: A2801Y001 OFFSET
PROCESS YELLOW ECOGLOSS
KGS: 1 LOT/BATCH: 69476

- In Black Ink Can:

PRINTING INKS
TINTAS PARA ARTES GRAFICAS
MARTINEZ AYALA
CODE: A2801N004 OFFSET
PROCESS BLACK ECOGLOSS
KGS: 1 LOTE/BATCH: 68867



Existing marks identification:

Apart from the label, cans lack of any external identification.

Sample supplier:

The applicant

Date of receipt:

06/05/08

A) Colorimetric evaluation of Offset inks according to the standard ISO 2846-1:2006.

Testing method:

Substrate Used:

.Phoenix Imperial APCO II/II de Scheufelen.

Proofer Used:

IGT ORANGE PROOFER (PE0103)

Spectrophotometer Used:

- . Spectrophotometer X-Rite 964 (DAE0009)
- . Spectrophotometer Geometry: 45°/0°
- . Observer: 2°
- . Illuminant: D50

ENVIRONMENT CONDITIONS:

- Ambient temperature during the test: 22.8°C
- Relative Humidity during the test: 57.7%

For a coverage factor of K=2 the expanded uncertainty and the correction factor for the L*, a*, b* measurements are:

	Correction Factor	Expanded Uncertainty
L*	0.07	±0.40
a*	-0.04	±0.50
b*	0.22	±0.53



RESULTS:

Colorimetric evaluation

Sample	Minimum ΔE^* Allowed.	Minimum ΔE^* Obtained.	Ink Layer Thickness (μm).
DA080021-01 (Cyan)	4	2.62	0.73
DA080021-02 (Magenta)	4	1.48	0.75
080F-00447-01 (Yellow)	4	0.71	0.75

Sample	Minimum L^* Allowed.	Minimum L^* Obtained.	Ink Layer Thickness (μm).
DA080021-03 (Black)	18	9.72	1.18

These results confirm that the tested inks conform with the ISO 2846-1:2006 Standard according to colour.

B) Transparency evaluation of Offset inks according to the standard ISO 2846-1:2006.

Testing method:

Substrate Used:

.Phoenix Imperial APCO II/II de Scheufelen.

Proofer Used:

IGT ORANGE PROOFER (PE0103)

Spectrophotometer Used:

- . Spectrophotometer X-Rite 964 (DAE0009)
- . Spectrophotometer Geometry: 45°/0°
- . Observer: 2°
- . Illuminant: D50

ENVIRONMENT CONDITIONS:

- Ambient temperature during the test: 22.8°C
- Relative Humidity during the test: 57.7%



LABORATORY: Graphic Arts

For a coverage factor of K=2 the expanded uncertainty and the correction factor for the L*, a*, b* measurements are:

	Correction Factor	Expanded Uncertainty
L*	0.07	±0.40
a*	-0.04	±0.50
b*	0.22	±0.53

RESULTS:

Transparency Evaluation

Sample	Minimum Transparency Allowed.	Transparency Obtained.
DA080021-01 (Cyan)	0.20	0.27
DA080021-02 (Magenta)	0.12	0.22
080F-00447-01 (Yellow)	0.08	0.09

These results confirm that the tested inks conform with the ISO 2846-1:2006 Standard according to transparency.



* These measurement results are relating to the samples which description is under the epigraph "Sample Identification"
* AIDO guarantees the confidentiality of the results of this test.
* This report will not be valid if it has erasures or corrections.
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Report Responsible:

Date, signature and position. 15/05/08

Report Reviser:

Date, signature and position 15/05/08