

Test Report

No. 4390983-09

Date: 09/JAN/2018

Page 1 of 6

Agfa Gevaert N.V.
Ms Hilde Vossen
Septestraat 27
2640 Mortsel
BELGIUM



The following samples were submitted and identified by/on behalf of the client as

SGS Job file : 4390983
Order date : 29/NOV/2017
Order number : 4500991782 / delivery note:81369130
Sample receiving Date : 12/DEC/2017
confirmation of test scope: 21/DEC/2017
Sampling : by Client or by a third party acting at the Client's direction
condition of the samples : appropriate for testing
Testing period : 21/DEC/2017 – 09/JAN/2018
Analytical scope : According to client's requirements

| Sample No | Sample designation |
|-----------|--|
| 171337612 | Orgacon conductive Ag screen print ink SI-P2000, batch no. 3480254/3 |

Test requested : In accordance with the RoHS Directive 2011/65/EU and subsequent amendments

Test Method(s) : (1) Determination of Cadmium by ICP-OES, acc. IEC 62321-5:2013
(2) Determination of Lead by ICP-OES, acc. IEC 62321-5:2013
(3) Determination of Mercury by CV-AAS, acc. IEC 62321-4:2013
(4) Determination of Chromium by ICP-OES, acc. IEC 62321-5:2013
(5) Determination of Chromium (VI) acc. IEC 62321:
A) (metal samples) Determination after extraction with hot water and derivatisation with 1,5-diphenyl-carbazide based on IEC 62321-7-1:2015 (metal samples), ion chromatography
B) (non-metallic samples) Determination after alkaline extraction and derivatisation with 1,5-diphenyl-carbazide based on IEC 62321, Ed1, 2008, C5 (polymer and electronic samples), ion chromatography
Remark: Due to its highly reactive nature the concentration of Cr(VI) in a corrosion-protection changes drastically with time and storage conditions. The results obtained by IEC 62321-7-1:2015 can therefore only give an indication of the presence/absence of Cr(VI) within the limitations of the method at the time of testing.
(6) Determination of PBB/PBDE by GC/MS, acc. IEC 62321-6:2015
Remark: Please note that acc. to IEC the testing of metals for PBB/PBDE is gratuitous
(7) Determination of Phthalates by GC/MS
In-house method, GC-MS after extraction with toluene

Test Result(s) : Please refer to next page(s)

R:\A\Agfa Gevaert N.V._10027069\2017\4390983\4390983-09_-612_Rohs_16-WM.Doc

Test Report

No. 4390983-09

Date: 09/JAN/2018

Page 2 of 6

Agfa Gevaert N.V.
Septestraat 27
2640 Mortsel
BELGIUM

Conclusion

: Based on the performed tests on submitted sample(s), the test results of Lead, Mercury, Cadmium, hexavalent Chromium, Polybrominated Biphenyls(PBB) and Polybrominated Diphenyl Ethers (PBDE) **comply** with the limits as set by RoHS Directive 2011/65/EU, Annex 2 and subsequent amendments

Based on the performed tests on submitted sample(s), the test results of Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) **comply with** the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

SGS INSTITUT FRESENIUS GmbH

i.V.

Wera Leonhard /cg
Projektleiterin / Project Manager

i.A.

Annkatriin Kuhl
Projektleiterin / Project Manager

Test Report

No. 4390983-09

Date: 09/JAN/2018

Page 3 of 6

Agfa Gevaert N.V.
 Septestraat 27
 2640 Mortsel
 BELGIUM

Test results by chemical method (Unit: mg/kg)

| Sample No. | | 171337612 | | |
|-------------------------------|-------------------|-----------|-----|--|
| Test Item(s): | Method (refer to) | | RL | RoHS Limit |
| Cadmium(Cd) | (1) | n.d. | 1 | 100 |
| Lead (Pb) | (2) | n.d. | 10 | 1000 |
| Mercury (Hg) | (3) | n.d. | 0,5 | 1000 |
| Chromium, hexavalent (Cr(VI)) | (5 B) | n.d. | 1 | 1000 |
| Sum of PBDEs | (6) | - | - | 1000 (Sum of polybrominated diphenyl ether) |
| Monobromodiphenyl ether | | n.d. | 50 | |
| Dibromodiphenyl ether | | n.d. | 50 | |
| Tribromodiphenyl ether | | n.d. | 50 | |
| Tetrabromodiphenyl ether | | n.d. | 50 | |
| Pentabromodiphenyl ether | | n.d. | 50 | |
| Hexabromodiphenyl ether | | n.d. | 50 | |
| Heptabromodiphenyl ether | | n.d. | 50 | |
| Octabromodiphenyl ether | | n.d. | 50 | |
| Nonabromodiphenyl ether | | n.d. | 50 | |
| Decabromodiphenyl ether | | n.d. | 50 | |
| Sum of PBBs | | - | - | |
| Monobromobiphenyl | | n.d. | 50 | |
| Dibromobiphenyl | | n.d. | 50 | |
| Tribromobiphenyl | | n.d. | 50 | |
| Tetrabromobiphenyl | | n.d. | 50 | |
| Hexabromobiphenyl | | n.d. | 50 | |
| Pentabromobiphenyl | | n.d. | 50 | |
| Heptabromobiphenyl | | n.d. | 50 | |
| Octabromobiphenyl | | n.d. | 50 | |
| Nonabromobiphenyl | | n.d. | 50 | |
| Decabromobiphenyl | | n.d. | 50 | |

Note : mg/kg = ppm n.d.= not detected RL = Report Limit n.a.= not analyzed
 **= elevated reporting limit due to matrix interferences

Test Report

No. 4390983-09

Date: 09/JAN/2018

Page 4 of 6

Agfa Gevaert N.V.
 Septestraat 27
 2640 Mortsel
 BELGIUM

| Sample No. | | 171337612 | | |
|---|----------------------|-----------|-----|-------|
| Test Item(s): | Method (refer to) | | RL | Limit |
| Phthalates | (7) | | | |
| Dibutylphthalate (DBP) (84-74-2)# | | n.d. | 100 | 1000# |
| Benzylbutylphthalate (BBP) (85-68-7) # | | n.d. | 100 | 1000# |
| Bis-(2-ethylhexyl)phthalate (DEHP); (117-81-7) # | | n.d. | 100 | 1000# |
| Diisononylphthalate (DINP) (28553-12-0) | | n.d. | 100 | 1000 |
| Di-n-octylphthalate (DNOP) (117-84-0) | | n.d. | 100 | 1000 |
| Diisodecylphthalate (DIDP) (26761-40-0) | | n.d. | 100 | 1000 |
| Diisobutylphthalate (DIBP) (84-69-5) # | | n.d. | 100 | 1000# |
| Di(C7-C11 alkyl) Phthalates linear + branched (DHNUP) calculated as DUDP (68648-91-9) | | n.d. | 100 | 1000 |
| Di-isoheptylphthalate (DIHP) (90937-19-2) | | n.d. | 100 | 1000 |
| Di-n-pentylphthalate (DnPP) (131-18-0) | | n.d. | 100 | 1000 |
| n-pentyl-iso-pentylphthalate (nPiPP) ; (776297-69-9) | | n.d. | 100 | 1000 |
| Di-iso-Pentylphthalate (DIPP) (605-50-5) | | n.d. | 100 | 1000 |
| 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear; (84777-06-0) | | n.d. | 100 | 1000 |
| Di-2-methoxyethylphthalate (DMEP); (117-82-8) | | n.d. | 100 | 1000 |
| Di-n-hexylphthalate (DnHP); (84-75-3) | | n.d. | 100 | 1000 |
| Di-iso-Hexylphthalat (1,2- Benzenedicarboxylic acid, dihexylester, branched and linear; (68515-50-4) | | n.d. | 100 | 1000 |

Note : mg/kg = ppm n.d.= not Detected RL = Report Limit n.a.= not analyzed

**= elevated reporting limit due to matrix interferences

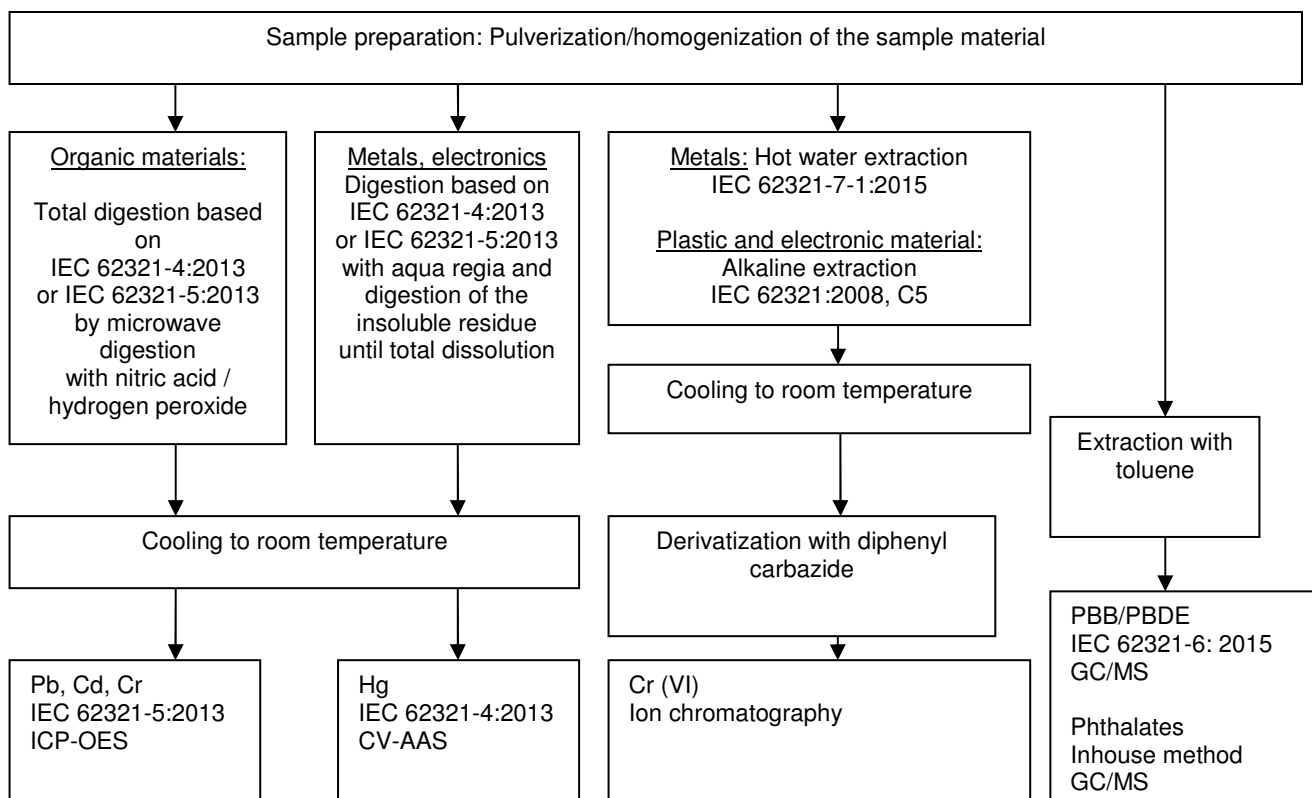
= Note: Commission Delegated Directive (EU) 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU as regards the list of restricted substances: addition of four phthalates **BBP**, **DBP**, **DEHP**, **DIBP** (limit 1000 mg/kg, per homogeneous material)
 limit valid from 22/JUL/2019

Under the REACH regulation some of the substances listed above are part of the ECHA candidate list of Substances of Very High Concern (SVHC).

For further information please refer to http://echa.europa.eu/chem_data/candidate_list_table_en.asp.

Agfa Gevaert N.V.
 Septestraat 27
 2640 Mortsel
 BELGIUM

Flow Chart for the working flow of the performed analysis



Test Report

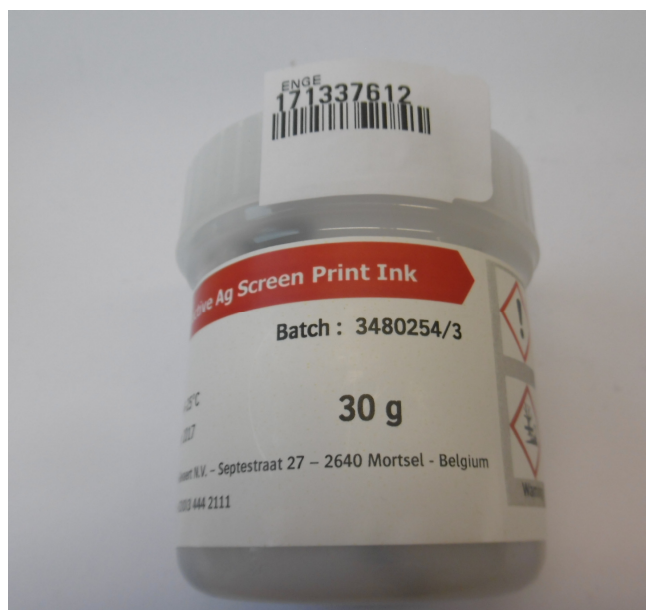
No. 4390983-09

Date: 09/JAN/2018

Page 6 of 6

Agfa Gevaert N.V.
Septestraat 27
2640 Mortsel
BELGIUM

Sample Photo(s)



End of Report

This document is issued by the Company subject to its General Conditions of Service (www.sgsgroup.de/agb). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein.
WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.