# Test Report No. F690101/LF-CTSAYGU24-09350



**SEROM CO., LTD.**
155,Pyeongdong-ro 803beon-gil
Gwangsan-gu,Gwangju
Korea

The following sample(s) was/were submitted and identified by/on behalf of the client as:-

| | | |
|---|---|---|
| **SGS File No.** | : | AYGU24-09350 |
| **Product Name** | : | Tau UV Ink RSC 3 - White |
| **Item No./Part No.** | : | 1690365 |
| **Received Date** | : | 2024. 11. 20 |
| **Test Period** | | 2024. 11. 20 to 2024. 11. 25 |
| **Test Results** | : | For further details, please refer to following page(s) |

**SGS Korea Co., Ltd.**
**/ Busan Branch**

**Taehee Kang / Technical Manager**

The test results of this test report are only limited to samples and sample names provided by the client and do not guarantee the quality of all products of the client. This test report shall not be used for public relation, advertisement, lawsuit and shall not be used by excerpts from it. This test report can be checked through the <http://rohs.kr.sgs.com/checkreport/main> This test report is not related to KS Q ISO/IEC 17025 and Korea Laboratory Accreditation Scheme.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



SGS Korea Co.,Ltd.
50, Sinsan-ro 29beon-gil, Saha-gu, Busan, Korea 49432
t +82 (0)51 795 7300 f +82 (0)51 795 7310 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

**Sample No.** : AYGU24-09350.001
**Sample Description** : Tau UV Ink RSC 3 - White
**Item No./Part No.** : 1690365
**Materials** : Printing Ink

## Heavy Metals

| Test Items | Unit | Test Method | MDL | Results |
|---|---|---|---|---|
| Cadmium (Cd) | mg/kg | With reference to IEC 62321-5 : 2013, by ICP-OES | 0.5 | N.D. |
| Lead (Pb) | mg/kg | With reference to IEC 62321-5 : 2013, by ICP-OES | 5 | N.D. |
| Mercury (Hg) | mg/kg | With reference to IEC 62321-4 : 2013+A1 : 2017, by ICP-OES | 2 | N.D. |
| Hexavalent Chromium (Cr VI)* | mg/kg | With reference to IEC 62321-7-2 : 2017, by UV-Vis and/or with reference to IEC 62321-5 : 2013, by ICP-OES | 8 | N.D. |

## Flame Retardants-PBBs/PBDEs

| Test Items | Unit | Test Method | MDL | Results |
|---|---|---|---|---|
| Monobromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Dibromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tribromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tetrabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Pentabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Hexabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Heptabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Octabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Nonabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Decabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Monobromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Dibromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tribromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tetrabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Pentabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Hexabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Heptabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Octabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Nonabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Decabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |

## Phthalates

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



SGS Korea Co.,Ltd.
50, Sinsan-ro 29beon-gil, Saha-gu, Busan, Korea 49432
t +82 (0)51 795 7300 f +82 (0)51 795 7310 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

**Sample No.** : AYGU24-09350.001
**Sample Description** : Tau UV Ink RSC 3 - White
**Item No./Part No.** : 1690365
**Materials** : Printing Ink

## Phthalates

| Test Items | Unit | Test Method | MDL | Results |
|---|---|---|---|---|
| Di-(2-ethylhexyl) phthalate (DEHP) | mg/kg | With reference to IEC 62321-8 : 2017, by GC-MS | 50 | N.D. |
| Di-butyl phthalate (DBP) | mg/kg | With reference to IEC 62321-8 : 2017, by GC-MS | 50 | N.D. |
| Benzyl butyl phthalate (BBP) | mg/kg | With reference to IEC 62321-8 : 2017, by GC-MS | 50 | N.D. |
| Di-isobutyl phthalate (DIBP) | mg/kg | With reference to IEC 62321-8 : 2017, by GC-MS | 50 | N.D. |

## Halogen Contents

| Test Items | Unit | Test Method | MDL | Results |
|---|---|---|---|---|
| Bromine(Br) | mg/kg | With reference to EN 14582 : 2016, by IC | 30 | N.D. |
| Chlorine(Cl) | mg/kg | With reference to EN 14582 : 2016, by IC | 30 | N.D. |
| Fluorine(F) | mg/kg | With reference to EN 14582 : 2016, by IC | 30 | N.D. |
| Iodine(I) | mg/kg | With reference to EN 14582 : 2016, by IC | 50 | N.D. |

NOTE: (1) N.D. = Not detected.(<MDL)
(2) mg/kg = ppm
(3) µg/kg = ppb
(4) MDL = Method Detection Limit
(5) - = No regulation
(6) Negative = Undetectable / Positive = Detectable
(7) ** = Qualitative analysis (No Unit)
(8) * = a. The result of Hexavalent Chromium (Cr(VI)) is "ND" as the result of Chromium (Cr) is "ND", and confirmation test of Hexavalent Chromium (Cr(VI)) is not required.
b. If the content of Total Chromium (Cr) is greater than the MDL of Hexavalent Chromium (Cr(VI)), it is the result of hexavalent Chromium by UV-VIS.

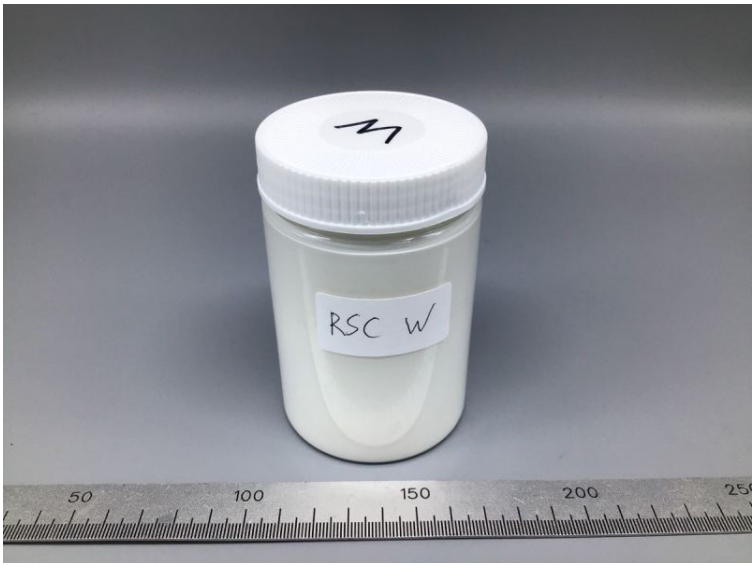
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



SGS Korea Co.,Ltd.
50, Sinsan-ro 29beon-gil, Saha-gu, Busan, Korea 49432
t +82 (0)51 795 7300 f +82 (0)51 795 7310 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

**Picture of Sample as Received:**




**AYGU24-09350.001**

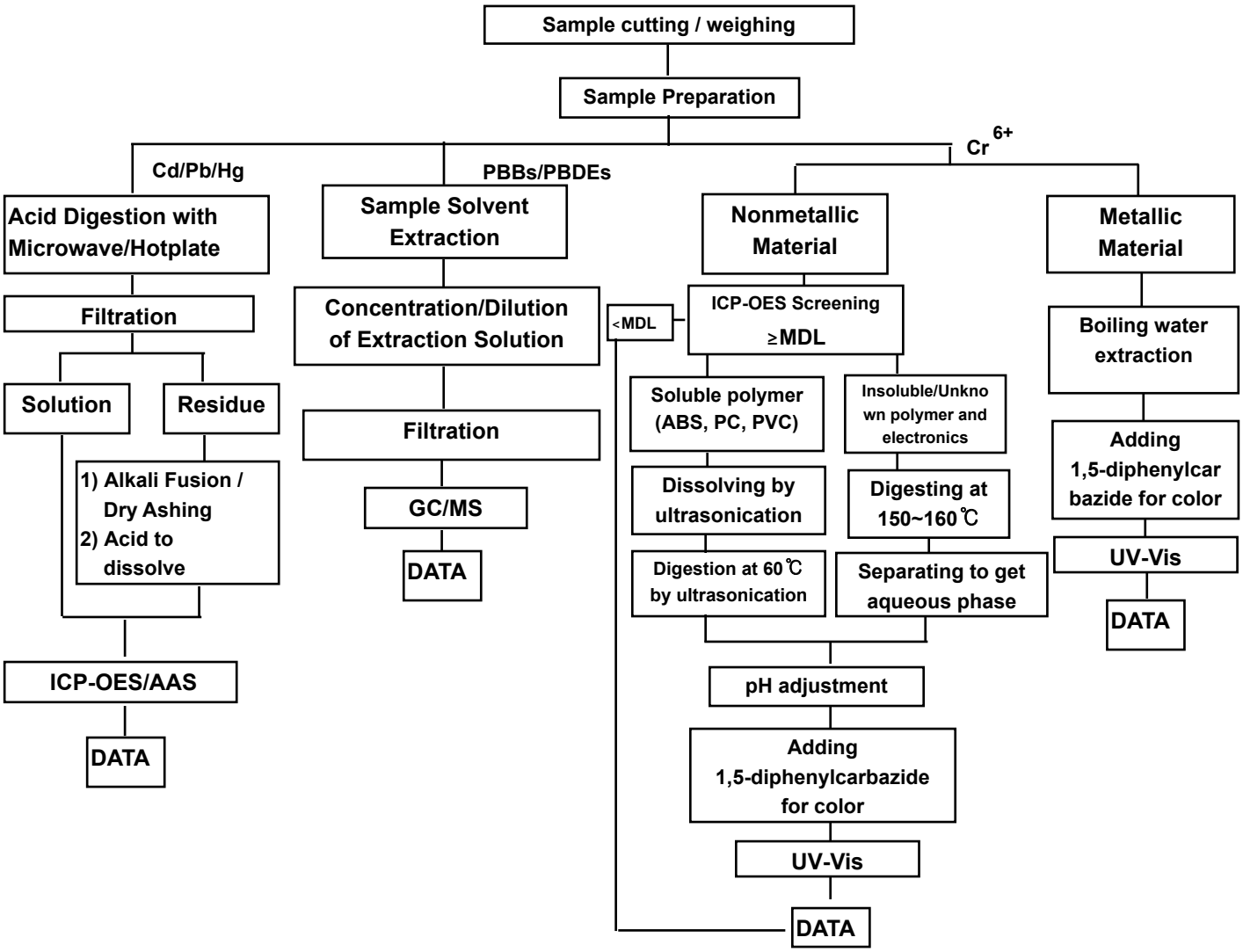
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



SGS Korea Co.,Ltd.
50, Sinsan-ro 29beon-gil, Saha-gu, Busan, Korea 49432
t +82 (0)51 795 7300 f +82 (0)51 795 7310 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

## Testing Flow Chart for RoHS:Cd/Pb/Hg/$Cr^{6+}$ /PBBs&PBDEs Testing




**The samples were dissolved totally at the acid digestion step of the above flow chart for Cd,Pb,Hg**
**Section Chief : Taehee Kang**

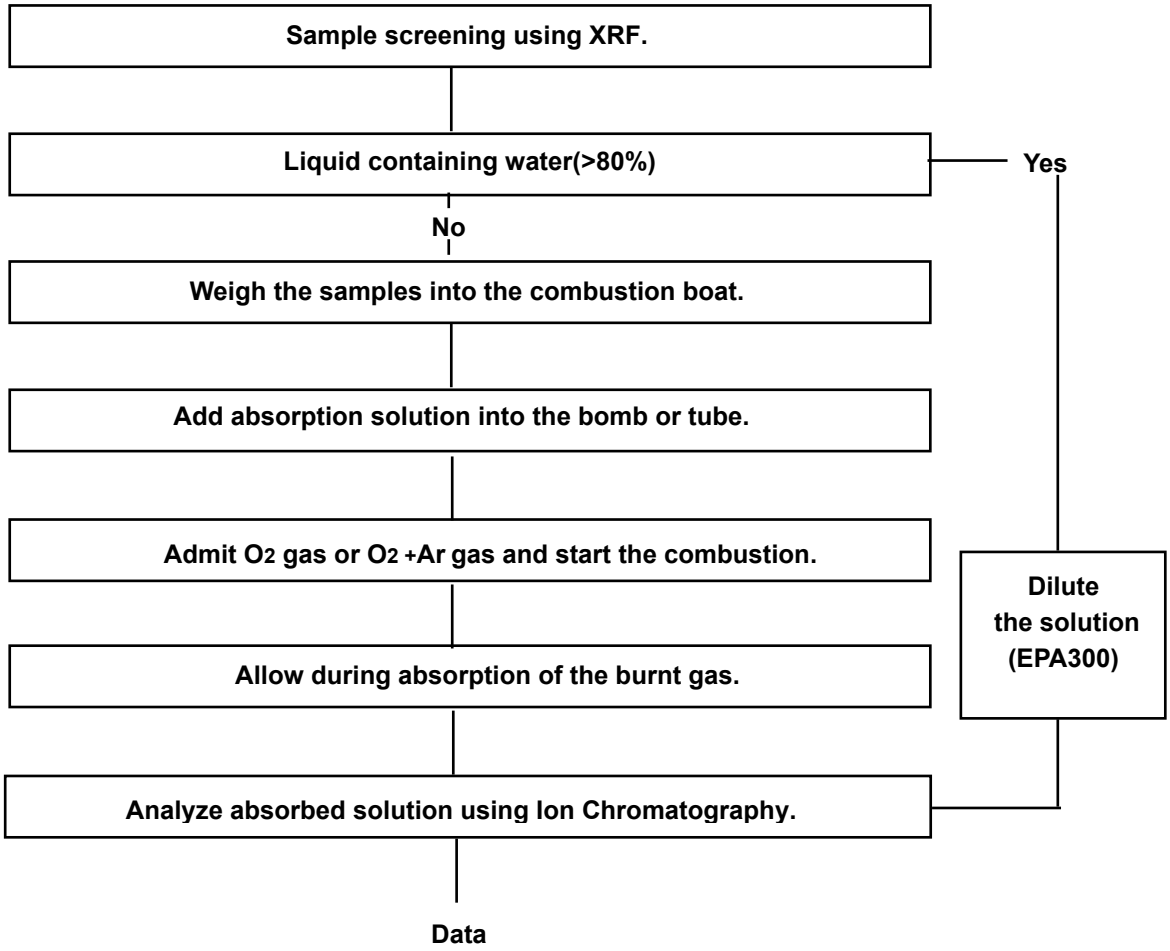
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



SGS Korea Co.,Ltd.
50, Sinsan-ro 29beon-gil, Saha-gu, Busan, Korea 49432
t +82 (0)51 795 7300 f +82 (0)51 795 7310 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

## Flow Chart for Halogen Test



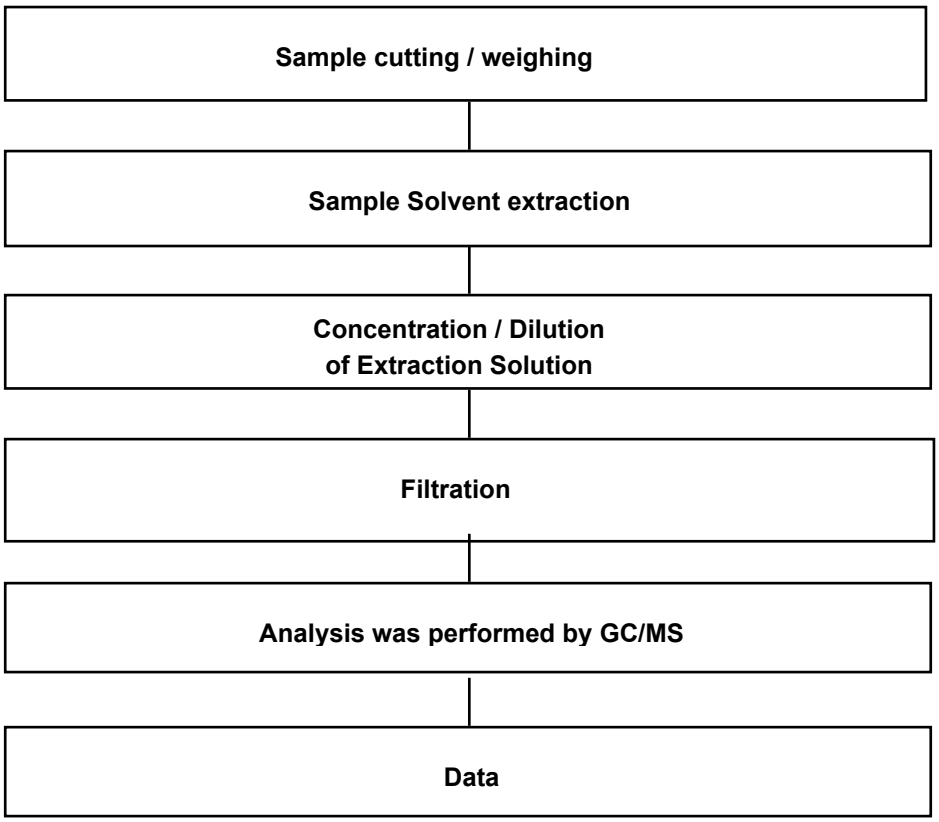

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



SGS Korea Co.,Ltd.
50, Sinsan-ro 29beon-gil, Saha-gu, Busan, Korea 49432
t +82 (0)51 795 7300 f +82 (0)51 795 7310 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

## Flow Chart for PhthalateTest




*** End of Report ***

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



SGS Korea Co.,Ltd.
50, Sinsan-ro 29beon-gil, Saha-gu, Busan, Korea 49432
t +82 (0)51 795 7300 f +82 (0)51 795 7310 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)