

Test Report

No. : CE/2016/83915

Date : 2016/08/25

Page : 1 of 7

MINMAX TECHNOLOGY CO., LTD
NO. 18, SIN-SIN ROAD, AN-PING INDUSTRIAL DISTRICT, TAINAN 702, TAIWAN



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

Sample Submitted By : MINMAX TECHNOLOGY CO., LTD
Sample Description : DC-DC CONVERTER
Style/Item No. : MKW20-XXXXXM SERIES
Sample Receiving Date : 2016/08/19
Testing Period : 2016/08/19 TO 2016/08/25

Test Requested : As specified by client, to test Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample.

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


Troy Chang, Manager - Tech
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei



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 <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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) tested.

Test Report

No. : CE/2016/83915

Date : 2016/08/25

Page : 2 of 7

MINMAX TECHNOLOGY CO., LTD

NO. 18, SIN-SIN ROAD, AN-PING INDUSTRIAL DISTRICT, TAINAN 702, TAIWAN



Test Result(s)

PART NAME No.1 : MIXED ALL PARTS

| Test Item(s) | Unit | Method | MDL | Result |
|----------------------------|-------|--|------|--------|
| | | | | No.1 |
| Cadmium (Cd) | mg/kg | With reference to IEC 62321-5 (2013) and performed by ICP-AES. | 2 | n.d. |
| Lead (Pb) | mg/kg | With reference to IEC 62321-5 (2013) and performed by ICP-AES. | 2 | n.d. |
| Mercury (Hg) | mg/kg | With reference to IEC 62321-4 (2013) and performed by ICP-AES. | 2 | n.d. |
| Hexavalent Chromium Cr(VI) | mg/kg | With reference to IEC 62321 (2008) and performed by UV-VIS. | 2 | n.d. |
| Sum of PBBs | mg/kg | With reference to IEC 62321-6 (2015) and performed by GC/MS. | - | n.d. |
| Monobromobiphenyl | mg/kg | | 5 | n.d. |
| Dibromobiphenyl | mg/kg | | 5 | n.d. |
| Tribromobiphenyl | mg/kg | | 5 | n.d. |
| Tetrabromobiphenyl | mg/kg | | 5 | n.d. |
| Pentabromobiphenyl | mg/kg | | 5 | n.d. |
| Hexabromobiphenyl | mg/kg | | 5 | n.d. |
| Heptabromobiphenyl | mg/kg | | 5 | n.d. |
| Octabromobiphenyl | mg/kg | | 5 | n.d. |
| Nonabromobiphenyl | mg/kg | | 5 | n.d. |
| Decabromobiphenyl | mg/kg | | 5 | n.d. |
| Sum of PBDEs | mg/kg | | - | n.d. |
| Monobromodiphenyl ether | mg/kg | | 5 | n.d. |
| Dibromodiphenyl ether | mg/kg | | 5 | n.d. |
| Tribromodiphenyl ether | mg/kg | 5 | n.d. | |
| Tetrabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Pentabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Hexabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Heptabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Octabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Nonabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Decabromodiphenyl ether | mg/kg | 5 | n.d. | |

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 <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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) tested.

Test Report

No. : CE/2016/83915

Date : 2016/08/25

Page : 3 of 7

MINMAX TECHNOLOGY CO., LTD

NO. 18, SIN-SIN ROAD, AN-PING INDUSTRIAL DISTRICT, TAINAN 702, TAIWAN



| Test Item(s) | Unit | Method | MDL | Result |
|---|-------|---|-----|--------|
| | | | | No.1 |
| BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7) | mg/kg | With reference to IEC 62321-8/CD (2013). Analysis was performed by GC/MS. | 50 | n.d. |
| DBP (Dibutyl phthalate) (CAS No.: 84-74-2) | mg/kg | | 50 | n.d. |
| DEHP (Di- (2-ethylhexyl) phthalate) (CAS No.: 117-81-7) | mg/kg | | 50 | n.d. |
| DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5) | mg/kg | | 50 | n.d. |

Note :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. " - " = Not Regulated
5. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

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 <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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) tested.

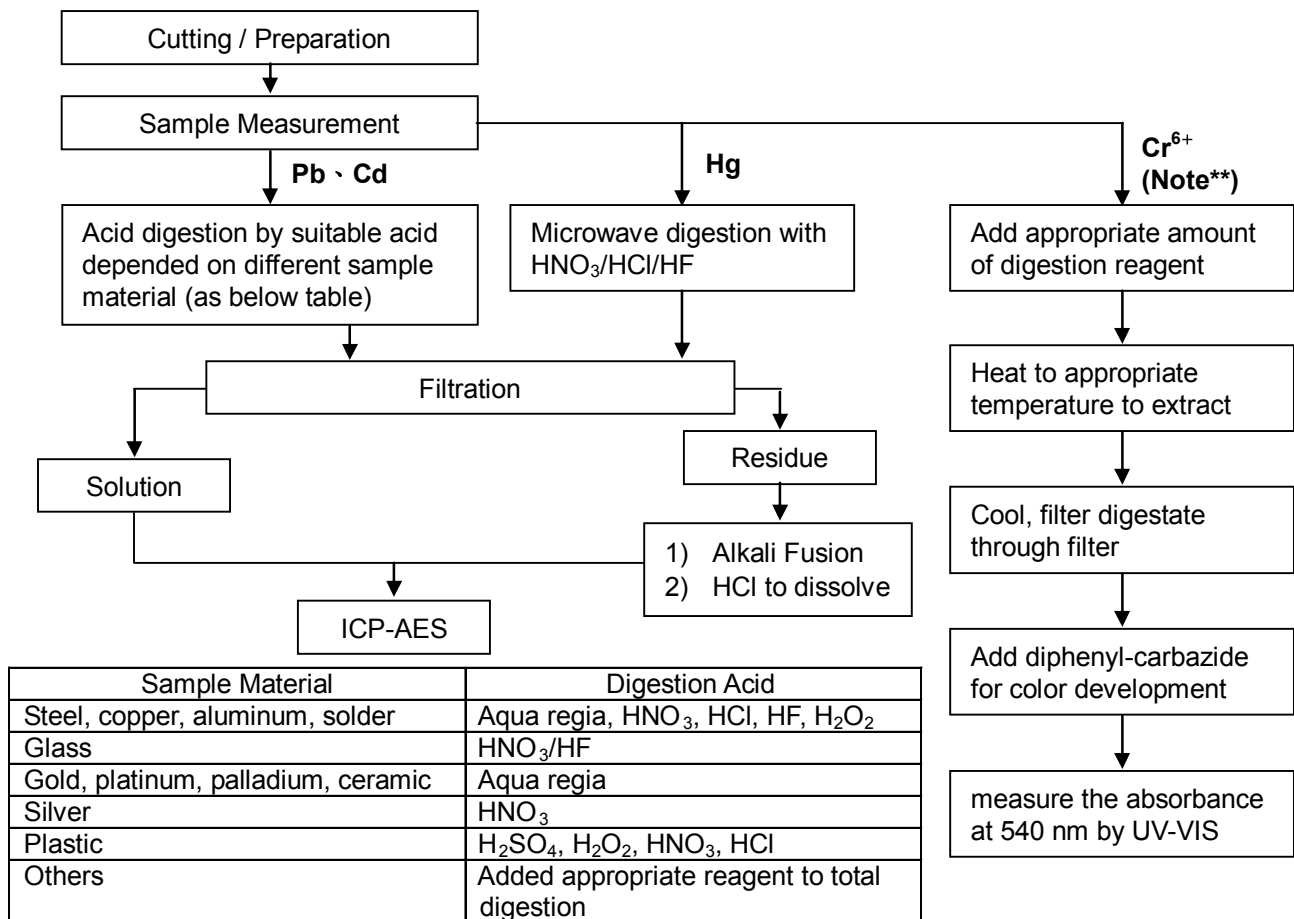


Analytical flow chart of Heavy Metal

These samples were dissolved totally by pre-conditioning method according to below flow chart.

(Cr⁶⁺ test method excluded)

- Technician: JR Wang
- Supervisor: Troy Chang



Note** (For IEC 62321)

- (1) For non-metallic material, add alkaline digestion reagent and heat to 90~95 °C.
- (2) For metallic material, add pure water and heat to boiling.

MINMAX TECHNOLOGY CO., LTD

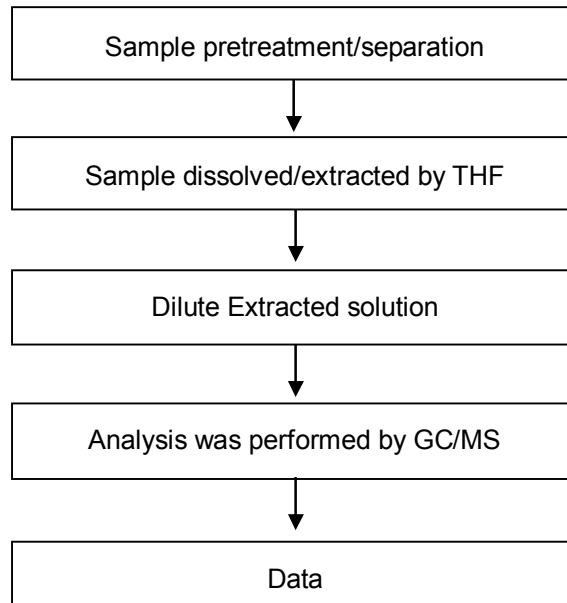
NO. 18, SIN-SIN ROAD, AN-PING INDUSTRIAL DISTRICT, TAINAN 702, TAIWAN



Analytical flow chart - Phthalate

- Technician: Andy Shu
- Supervisor: Troy Chang

【Test method: IEC 62321-8】

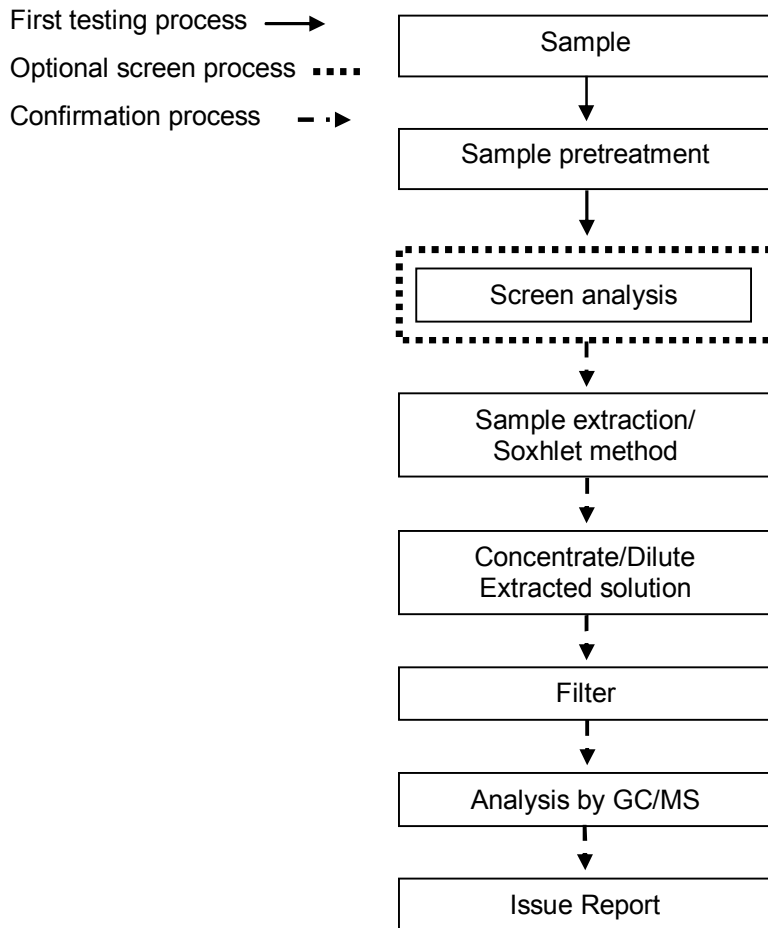


This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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 instruction, 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) tested.



Analytical flow chart - PBB/PBDE

- Technician : Yaling Tu
- Supervisor: Troy Chang



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 <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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) tested.

Test Report

No. : CE/2016/83915

Date : 2016/08/25

Page : 7 of 7

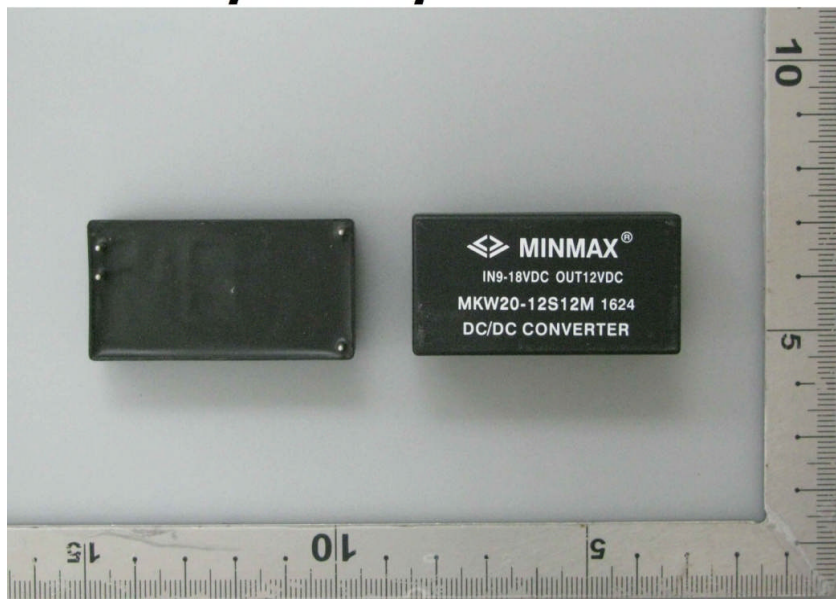
MINMAX TECHNOLOGY CO., LTD

NO. 18, SIN-SIN ROAD, AN-PING INDUSTRIAL DISTRICT, TAINAN 702, TAIWAN



* The tested sample / part is marked by an arrow if it's shown on the photo. *

CE/2016/83915



** 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 <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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 instruction, 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) tested.