

No. : KA/2013/81128

Date : 2013/08/29

MINMAX TECHNOLOGY CO., LTD 18, SHIN-SIN ROAD, TAINAN 702, TAIWAN

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

Sample Description	: DC-DC CONVERTER
Style/Item No.	: MSCW01-XXXXX SERIES
Sample Receiving Date	: 2013/08/26
Testing Period	: 2013/08/26 TO 2013/08/29
Sample Submitted By	: MINMAX TECHNOLOGY CO., LTD

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

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



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Test Result(s)

PART NAME No.1

MIXED ALL PARTS:DC-DC CONVERTER :

	Unit	Method	MDL	Result	
Test Item(s)	Unit	Method		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	22.5	
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		-	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	1 [5	n.d.	
Heptabromobiphenyl	mg/kg	With reference to IEC 62321: 2008 and	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	performed by GC/MS.	-	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	1 [5	n.d.	
Nonabromodiphenyl ether	mg/kg	1 [5	n.d.	
Decabromodiphenyl ether	mg/kg	1 1	5	n.d.	

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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.

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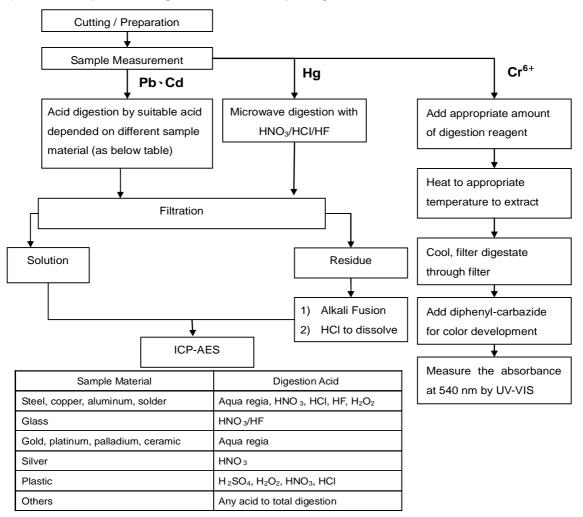


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- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr6+ test method excluded)
- 2) Name of the person who made measurement: Alex Chang
- 3) Name of the person in charge of measurement: Ray Chang



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

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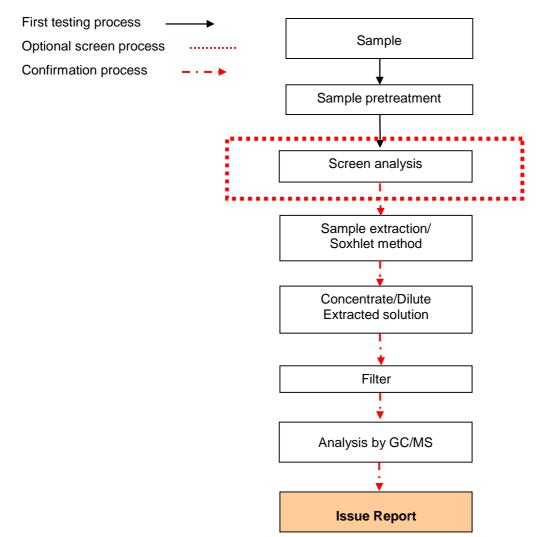
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PBB/PBDE analytical FLOW CHART

1) Name of the person who made measurement: Anson Tsao

2) Name of the person in charge of measurement: Ray Chang



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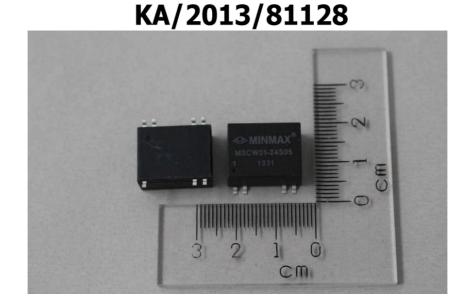
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* The tested sample / part is marked by an arrow if it's shown on the photo. *



** End of Report **

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