



## Certificate of RoHS Compliance

Based on the information available to us from our suppliers, and to the best of Alliance's knowledge, we hereby certify that the materials listed below are RoHS compliant and meet the requirements of EU RoHS Directive 2011/65/EU, and do not contain the substances listed in the tables below in concentrations exceeding the Maximum Concentration Value (MCV).



## Certificate of REACH Compliance

Based on the information available to us from our suppliers, and to the best of Alliance's knowledge, we hereby certify that the materials listed below are REACH compliant and meet the requirements of REACH ECHA 20/06/2013, and do not contain the Substances Of Very High Concern (SVHC) listed in the tables below per ECHA regulations of (EC) No.1907/2006



Page 2: Compression Bonded NdFeB 

Page 10: Injection Molded NdFeB w/PA12 

Page 15: Injection Molded NdFeB w/PPS 

Alliance LLC

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## Test Report

No. TSNEC1301066301

Date: 28 Oct 2013

Page 1 of 8

### Compression Bonded NdFeB Magnets

The following sample(s) was/were submitted and identified on behalf of the clients as : Bonded NdFeB Magnet

SGS Job No. : TP13-005381 - TJ  
 Main Substance : NdFeB  
 Date of Sample Received : 22 Oct 2013  
 Testing Period : 22 Oct 2013 - 28 Oct 2013  
 Test Requested : Selected test(s) as requested by client.  
 Test Method : Please refer to next page(s).  
 Test Results : Please refer to next page(s).

Signed for and on behalf of  
 SGS-CSTC Ltd.



Reabeca Zhou  
 Approved Signatory

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## Test Report

No. TSNEC1301066301

Date: 28 Oct 2013

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Test Results :

### Test Part Description :

Specimen No.	SGS Sample ID	Description
1	TSN13-010663.001	solid with black coating (mix all)

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated

### Cadmium, Lead, Mercury, Hexavalent Chromium, PBBs(Polybrominated biphenyls) and PBDEs(PBDEs) (Polybrominated biphenyl ethers)

- Test Method :
- (1) With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
  - (2) With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
  - (3) With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
  - (4) With reference to IEC 62321:2008, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
  - (5) With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	Unit	MDL	001
Cadmium (Cd)	mg/kg	2	ND
Lead (Pb)	mg/kg	2	ND
Mercury (Hg)	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	mg/kg	2	ND
Sum of PBBs	mg/kg	-	ND
Monobromobiphenyl	mg/kg	5	ND
Dibromobiphenyl	mg/kg	5	ND
Tribromobiphenyl	mg/kg	5	ND
Tetrabromobiphenyl	mg/kg	5	ND
Pentabromobiphenyl	mg/kg	5	ND
Hexabromobiphenyl	mg/kg	5	ND
Heptabromobiphenyl	mg/kg	5	ND
Octabromobiphenyl	mg/kg	5	ND
Nonabromobiphenyl	mg/kg	5	ND
Decabromobiphenyl	mg/kg	5	ND
Sum of PBDEs	mg/kg	-	ND
Monobromodiphenyl ether	mg/kg	5	ND

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## Test Report

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<u>Test Item(s)</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Dibromodiphenyl ether	mg/kg	5	ND
Tribromodiphenyl ether	mg/kg	5	ND
Tetrabromodiphenyl ether	mg/kg	5	ND
Pentabromodiphenyl ether	mg/kg	5	ND
Hexabromodiphenyl ether	mg/kg	5	ND
Heptabromodiphenyl ether	mg/kg	5	ND
Octabromodiphenyl ether	mg/kg	5	ND
Nonabromodiphenyl ether	mg/kg	5	ND
Decabromodiphenyl ether	mg/kg	5	ND

### Phthalates

Test Method : With reference to EN14372: 2004, analysis was performed by GC-MS.

<u>Test Item(s)</u>	<u>CAS NO.</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Dibutyl Phthalate (DBP)	84-74-2	% (w/w)	0.003	ND
Benzylbutyl Phthalate (BBP)	85-68-7	% (w/w)	0.003	ND
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	% (w/w)	0.003	ND

Notes :

- (1) Reference Information: Directive 2011/65/EU recasting RoHS directive 2002/95/EC: Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP) and Dibutyl phthalate (DBP) are considered as a priority for risk evaluation and substance restriction.

### Hexabromocyclododecane (HBCDD)

Test Method : With reference to IEC 62321:2008, analysis was performed by GC-MS.

<u>Test Item(s)</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Hexabromocyclododecane (HBCDD)	mg/kg	10	ND

Notes :

- (1) Reference Information: Directive 2011/65/EU recasting RoHS directive 2002/95/EC: Hexabromocyclododecane (HBCDD) is considered as a priority for risk evaluation and substance restriction.

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Date: 28 Oct 2013

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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 and only for reference.

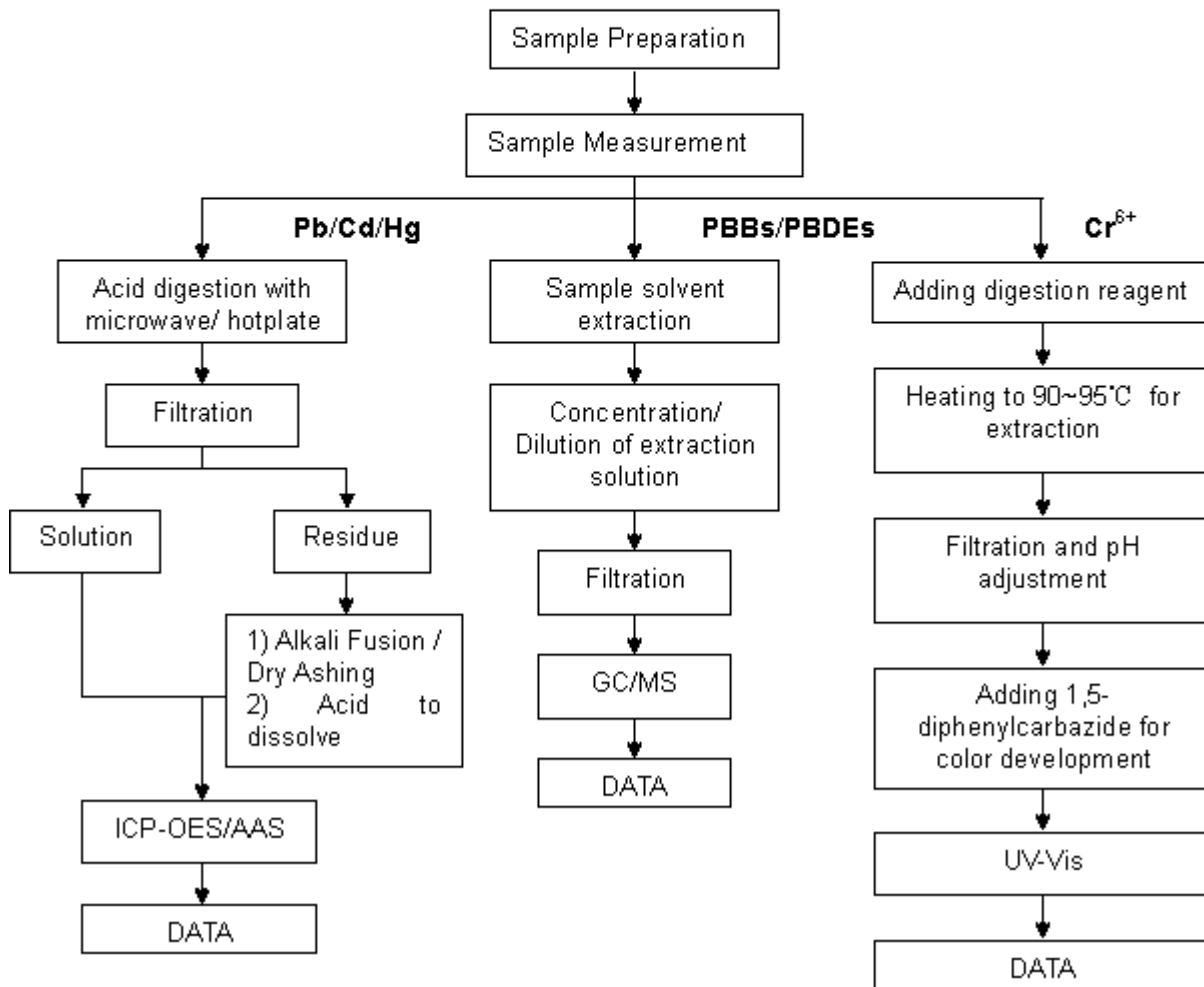
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**ATTACHMENTS**

**Cd/Pb/Hg/Cr<sup>6+</sup>/PBBs&PBDEs Flow Chart**

- 1) Name of the person who made testing: Aaron Wang/Jason Li /Angell Yao
- 2) Name of the person in charge of testing: Cindy Yin/Rex Zhu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded)

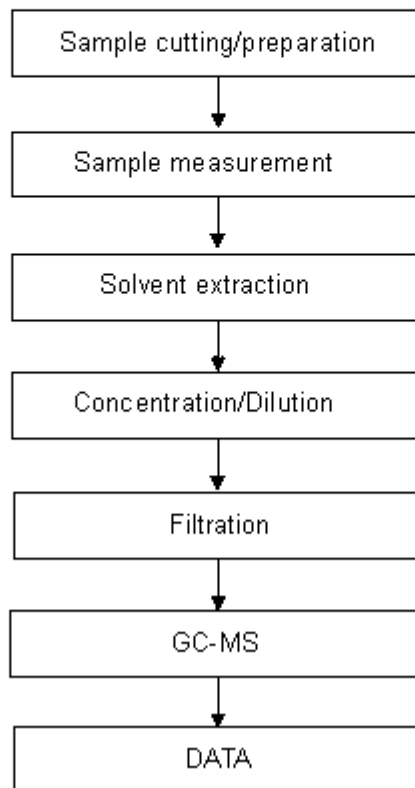


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**ATTACHMENTS**

**Phthalate Testing Flow Chart**

- 1) Name of the person who made testing: Marina Sun
- 2) Name of the person in charge of testing: Rex Zhu

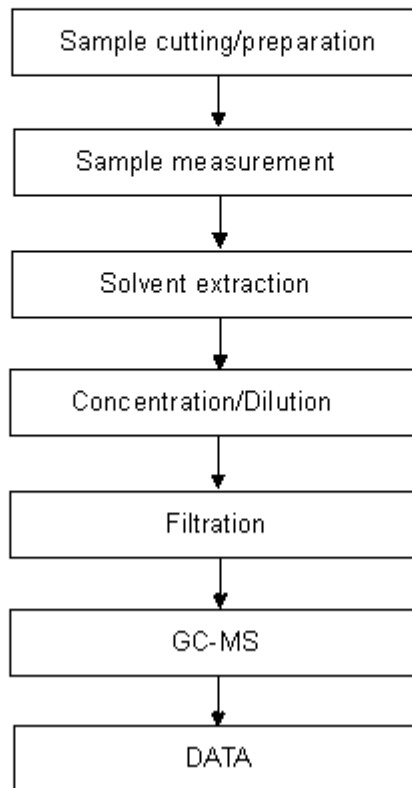


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**ATTACHMENTS**

**HBCDD Testing Flow Chart**

- 1) Name of the person who made testing: Marina Sun
- 2) Name of the person in charge of testing: Rex Zhu



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No. TSNEC1301066301

Date: 28 Oct 2013

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Sample photo:



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\*\*\* End of Report \*\*\*

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## Test Report

No. TSNEC1300105406

Date: 06 Feb 2013

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### Injection Molded NdFeB with Nylon 12

The following sample(s) was/were submitted and identified on behalf of the clients as : NdFeB COMPOUND

SGS Job No. : TP13-000506 - TJ  
 Model No. : MQIP-L250-20060-205  
 Client Ref. Info. : SEE ATTACHMENT  
 Main Substance : NdFeB+[(CH<sub>2</sub>)<sub>11</sub>-NHCO]<sub>n</sub>-  
 Date of Sample Received : 31 Jan 2013  
 Testing Period : 31 Jan 2013 - 05 Feb 2013  
 Test Requested : Selected test(s) as requested by client.  
 Test Method : Please refer to next page(s).  
 Test Results : Please refer to next page(s).  
 Conclusion : Based on the performed tests on submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of  
 SGS-CSTC Ltd.



Summer Bai  
 Approved Signatory

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**Test Report**

No. TSNEC1300105406

Date: 06 Feb 2013

Page 2 of 6

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
1	TSN13-001054.006	black solid

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated

**RoHS Directive 2011/65/EU**

Test Method : With reference to IEC 62321:2008

- (1) Determination of Cadmium by ICP-OES.
- (2) Determination of Lead by ICP-OES.
- (3) Determination of Mercury by ICP-OES.
- (4) Determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
- (5) Determination of PBBs / PBDEs content by GC-MS.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>006</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	2	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND

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<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>006</u>
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND

### Notes :

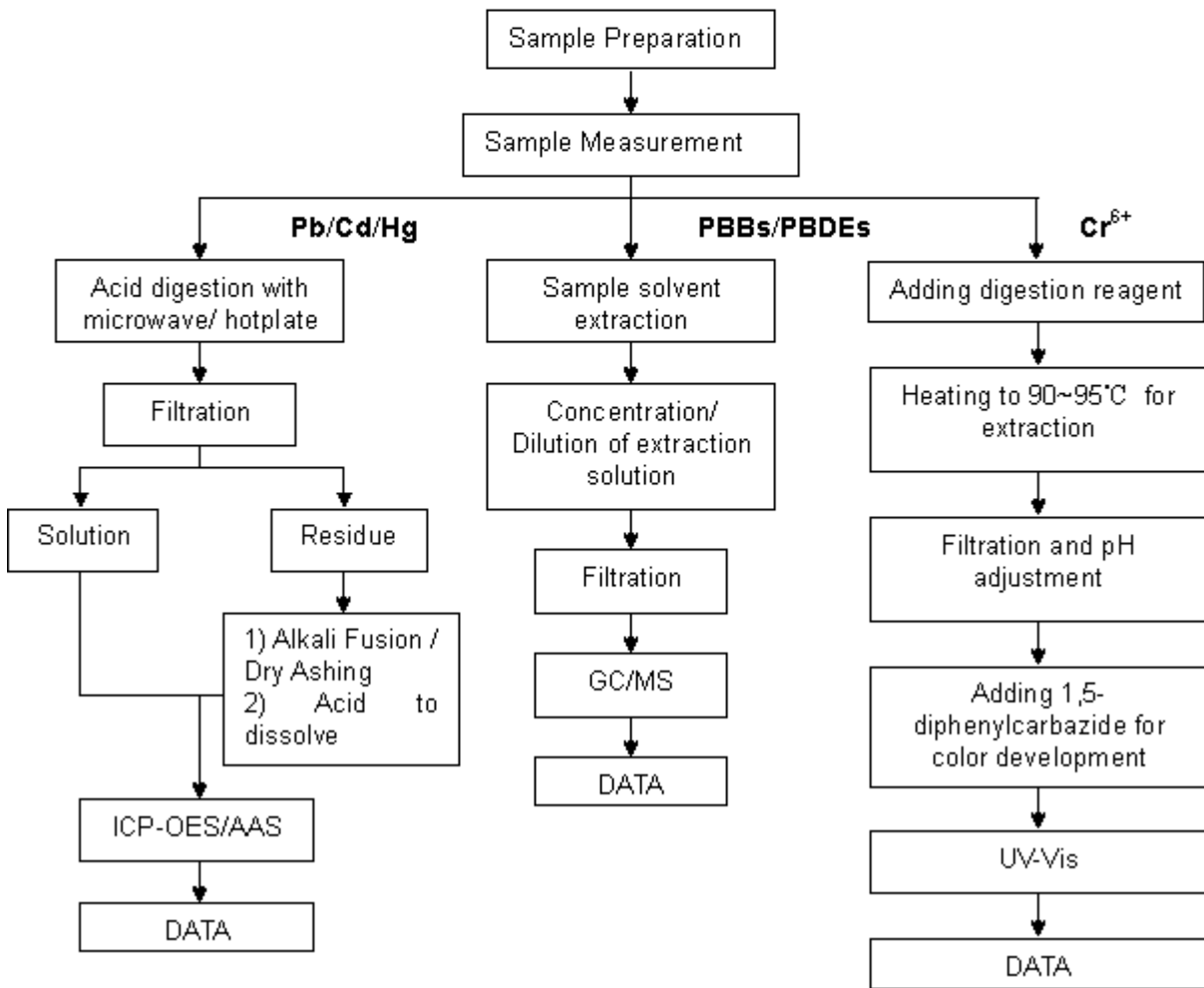
- (1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II.

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**ATTACHMENTS**

**Cd/Pb/Hg/Cr<sup>6+</sup>/PBBs/PBDEs Flow Chart**

- 1) Name of the person who made testing: Aaron Wang/Jason Li /Angell Yao
- 2) Name of the person in charge of testing: Cindy Yin/Rex Zhu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded)



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Sample photo:



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## Test Report

No. TSNEC1300105408

Date: 06 Feb 2013

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### Injection Molded NdFeB with PPS

The following sample(s) was/were submitted and identified on behalf of the clients as : NdFeB COMPOUND

SGS Job No. : TP13-000506 - TJ  
 Model No. : MQIP-M760-20000-216  
 Client Ref. Info. : OTHER MODEL NO.:MQIP-N750-20076-215;MQIP-N760-20076-216  
 MQIP-M755B-20000-215  
 Main Substance : NdFeB+-[C<sub>6</sub>H<sub>4</sub>-S]<sub>n</sub>-  
 Date of Sample Received : 31 Jan 2013  
 Testing Period : 31 Jan 2013 - 05 Feb 2013  
 Test Requested : Selected test(s) as requested by client.  
 Test Method : Please refer to next page(s).  
 Test Results : Please refer to next page(s).  
 Conclusion : Based on the performed tests on submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of  
 SGS-CSTC Ltd.



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## Test Report

No. TSNEC1300105408

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Test Results :

### Test Part Description :

Specimen No.	SGS Sample ID	Description
1	TSN13-001054.008	black solid

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated

### RoHS Directive 2011/65/EU

Test Method : With reference to IEC 62321:2008

- (1) Determination of Cadmium by ICP-OES.
- (2) Determination of Lead by ICP-OES.
- (3) Determination of Mercury by ICP-OES.
- (4) Determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
- (5) Determination of PBBs / PBDEs content by GC-MS.

Test Item(s)	Limit	Unit	MDL	008
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	2	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND

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<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>008</u>
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND

Notes :

- (1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II.

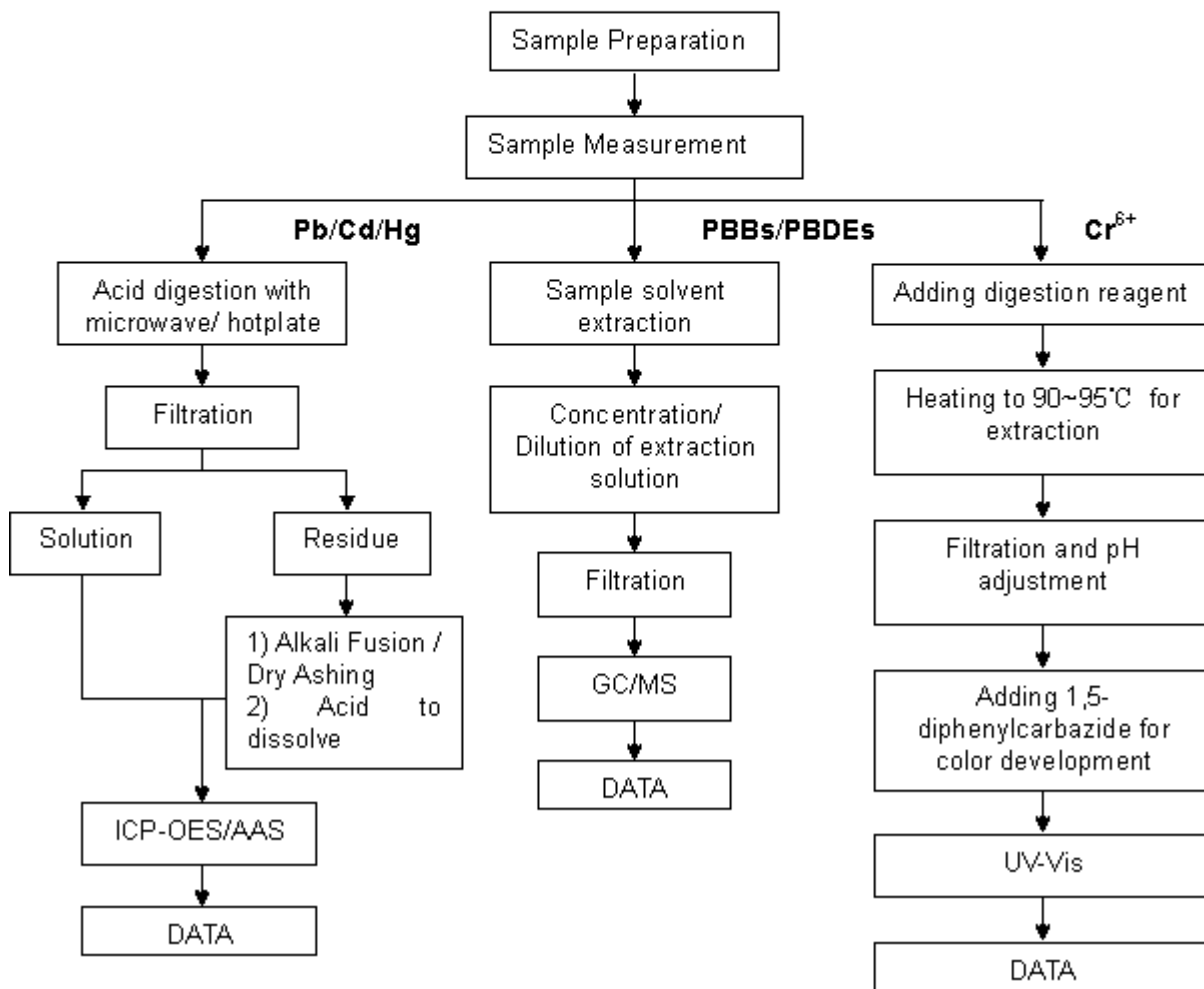
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**ATTACHMENTS**

**Cd/Pb/Hg/Cr<sup>6+</sup>/PBBs/PBDEs Flow Chart**

- 1) Name of the person who made testing: Aaron Wang/Jason Li /Angell Yao
- 2) Name of the person in charge of testing: Cindy Yin/Rex Zhu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded)



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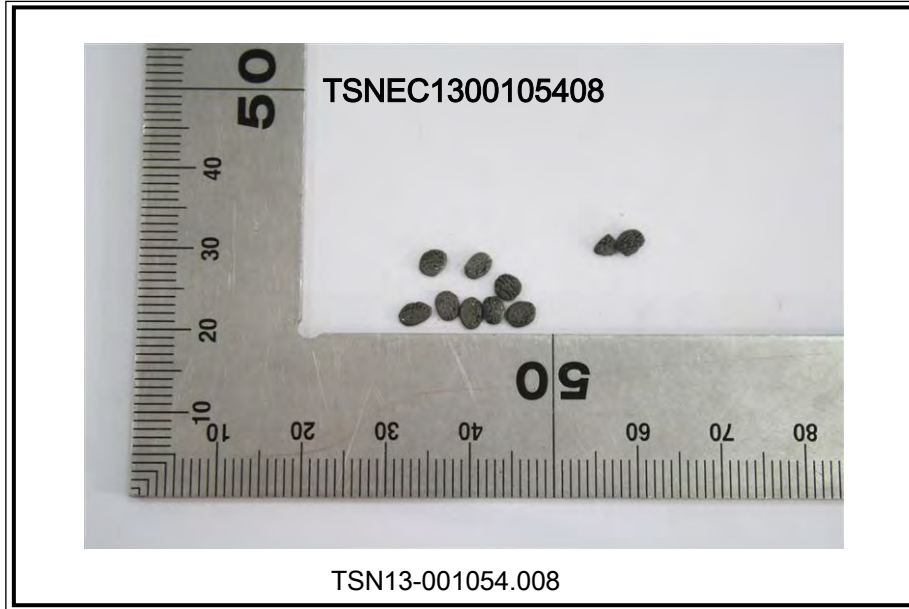
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Sample photo:



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