



ICP Test Report Certification Packet

Company Name: Littelfuse, Inc.

Product Type: High Energy Industrial Varistor

Product Series: HA, HB, HC, HF, HG, DHB Varistor Series RoHS Models

Issue Date: July 8, 2010

It is hereby certified by Littelfuse, Inc. that there is neither RoHS (EU Directive 2002/95/EC)-restricted substance nor such use, for materials to be used for unit parts, for packing/packaging materials, and for additives and the like in the manufacturing processes.

And it is certified by Littelfuse, Inc. that the series products listed above are compliant with LF Halogen Free Standard ($Cl \leq 800\text{ppm}$, $Br \leq 800\text{ppm}$, $Cl + Br \leq 1000\text{ppm}$).

In addition, it is hereby reported to you that the parts and sub-materials, the materials to be used for unit parts, the packing/packaging materials, and the additives and the like in the manufacturing processes, are all composed of the following components.

Issued by: *David Huang*

< DGLF Environmental, Health & Safety Engineer >

(1) Parts, sub-materials and unit parts

This document covers Metal Oxide Varistors HA, HB, HC, HF, HG, DHB Varistor Series RoHS Compliant models manufactured by Littelfuse, Inc.

Please see Table 1 for raw materials used.

(2) The ICP data on all measurable substances

Please see appropriate pages as identified in Table 1

Remarks :

Table 1: List of Raw Materials covered by this report

Total Parts	P/N	Raw Material Description	Page
1	N/A	Black disc, type DD.	3-7
2	N/A	Silver Paste	8-13
3	N/A	Pb-free Solder Paste	14-22
4	N/A	Terminal	23-26
5	N/A	Halogen Free Red Epoxy Resin	27-33



TEST REPORT

NUMBER: SZHH0049776103

APPLICANT: LITTELFUSE, INC.
8755 WEST HIGGINS ROAD SUITE 500
CHICAGO IL 60631 USA

DATE: Jun 19, 2010

ATTN: KRISTEEN BACILA/ARSENIO CESISTA JR.

SAMPLE DESCRIPTION:

ONE (1) SUBMITTED SAMPLE SAID TO BE **DD BLACK DISC.**

TESTED COMPONENT : GREY SOLID.

PART DESCRIPTION : DD BLACK DISC.

DATE SAMPLE RECEIVED : JUN 12, 2010.

DATE TEST STARTED : JUN 12, 2010.



TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

AUTHORIZED BY:
FOR INTERTEK TESTING SERVICES
SHENZHEN LTD.

KARBON M.Y. WU
GENERAL MANAGER

**TEST REPORT**

NUMBER: SZHH0049776103

TESTS CONDUCTED

RoHS CHEMICAL TEST

(A) TEST RESULT SUMMARY:

TESTING ITEM	RESULT
CADMIUM (Cd) CONTENT (mg/kg)	ND (<2)
LEAD (Pb) CONTENT (mg/kg)	ND (<2)
MERCURY (Hg) CONTENT (mg/kg)	ND (<2)
CHROMIUM (VI)(Cr ⁶⁺) CONTENT (mg/kg)	15
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)	
MONOBROMOBIPHENYL (MonoBB)	ND (<5)
DIBROMOBIPHENYL (DiBB)	ND (<5)
TRIBROMOBIPHENYL (TriBB)	ND (<5)
TETRABROMOBIPHENYL (TetraBB)	ND (<5)
PENTABROMOBIPHENYL (PentaBB)	ND (<5)
HEXABROMOBIPHENYL (HexaBB)	ND (<5)
HEPTABROMOBIPHENYL (HeptaBB)	ND (<5)
OCTABROMOBIPHENYL (OctaBB)	ND (<5)
NONABROMOBIPHENYL (NonaBB)	ND (<5)
DECABROMOBIPHENYL (DecaBB)	ND (<5)
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)	
MONOBROMODIPHENYL ETHER (MonoBDE)	ND (<5)
DIBROMODIPHENYL ETHER (DiBDE)	ND (<5)
TRIBROMODIPHENYL ETHER (TriBDE)	ND (<5)
TETRABROMODIPHENYL ETHER (TetraBDE)	ND (<5)
PENTABROMODIPHENYL ETHER (PentaBDE)	ND (<5)
HEXABROMODIPHENYL ETHER (HexaBDE)	ND (<5)
HEPTABROMODIPHENYL ETHER (HeptaBDE)	ND (<5)
OCTABROMODIPHENYL ETHER (OctaBDE)	ND (<5)
NONABROMODIPHENYL ETHER (NonaBDE)	ND (<5)
DECABROMODIPHENYL ETHER (DecaBDE)	ND (<5)

CHEMIST: LV LINNA

mg/kg = MILLIGRAM PER KILOGRAM = ppm

< = LESS THAN

ND = NOT DETECTED

**TEST REPORT**

NUMBER: SZHH0049776103

TESTS CONDUCTED

(B) RoHS REQUIREMENT:

RESTRICTED SUBSTANCES	LIMITS
CADMIUM (Cd)	0.01% (100 ppm)
LEAD (Pb)	0.1% (1000 ppm)
MERCURY (Hg)	0.1% (1000 ppm)
CHROMIUM (VI) (Cr ⁶⁺)	0.1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs)	0.1% (1000 ppm)
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	0.1% (1000 ppm)

THE ABOVE LIMITS WERE QUOTED FROM 2002/95/EC AND AMENDMENT 2005/618/EC FOR HOMOGENEOUS MATERIAL.

(C) TEST METHOD:

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
CADMIUM (Cd) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0:2008, BY ACID DIGESTION AND DETERMINED BY ICP - OES	2 mg/kg
LEAD (Pb) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0:2008, BY ACID DIGESTION AND DETERMINED BY ICP - OES	2 mg/kg
MERCURY (Hg) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0:2008, BY ACID DIGESTION AND DETERMINED BY ICP - OES	2 mg/kg
CHROMIUM (VI) (Cr ⁶⁺) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0:2008, BY ALKALINE DIGESTION AND DETERMINED BY UV-VIS SPECTROPHOTOMETER	1 mg/kg
POLYBROMINATED BIPHENYLS (PBBs) & POLYBROMINATED DIPHENYL ETHERS (PBDEs)	WITH REFERENCE TO IEC 62321 EDITION 1.0:2008, BY SOLVENT EXTRACTION AND DETERMINED BY GC/MS AND FURTHER HPLC CONFIRMATION WHEN NECESSARY	5 mg/kg

DATE SAMPLE RECEIVED : JUN 12, 2010

TESTING PERIOD : JUN 12, 2010 TO JUN 17, 2010

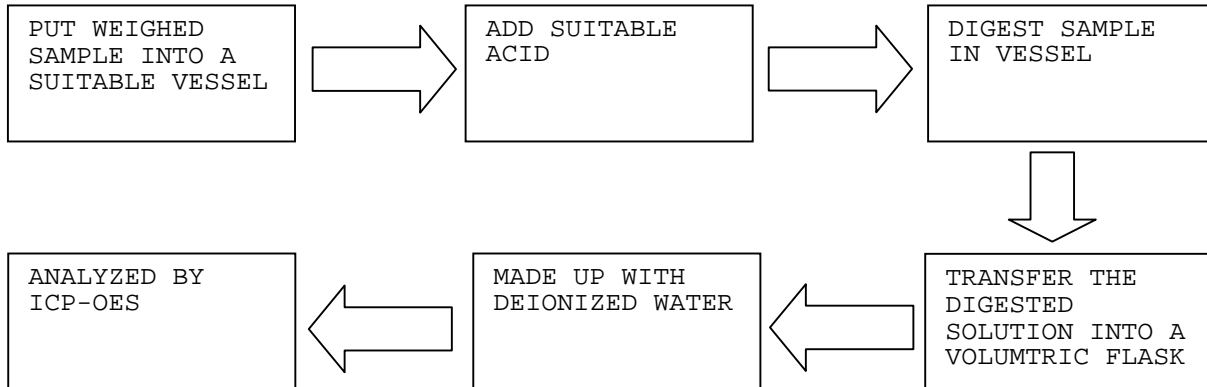
TEST REPORT

NUMBER: SZHH0049776103

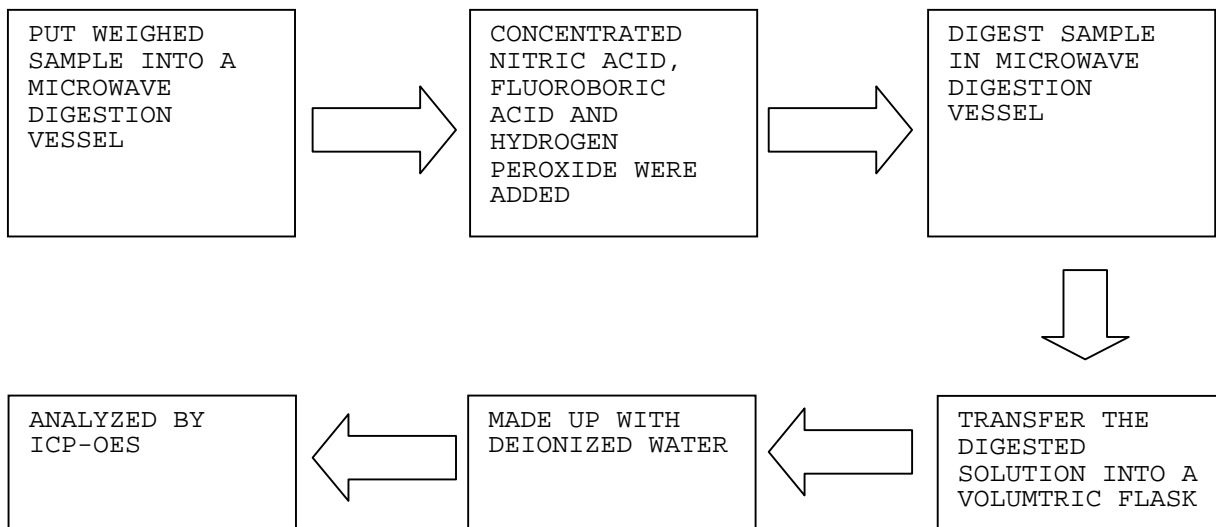
TESTS CONDUCTED

(D) MEASUREMENT FLOWCHART:

1. TEST FOR Cd/Pb CONTENTS



2. TEST FOR Hg CONTENT

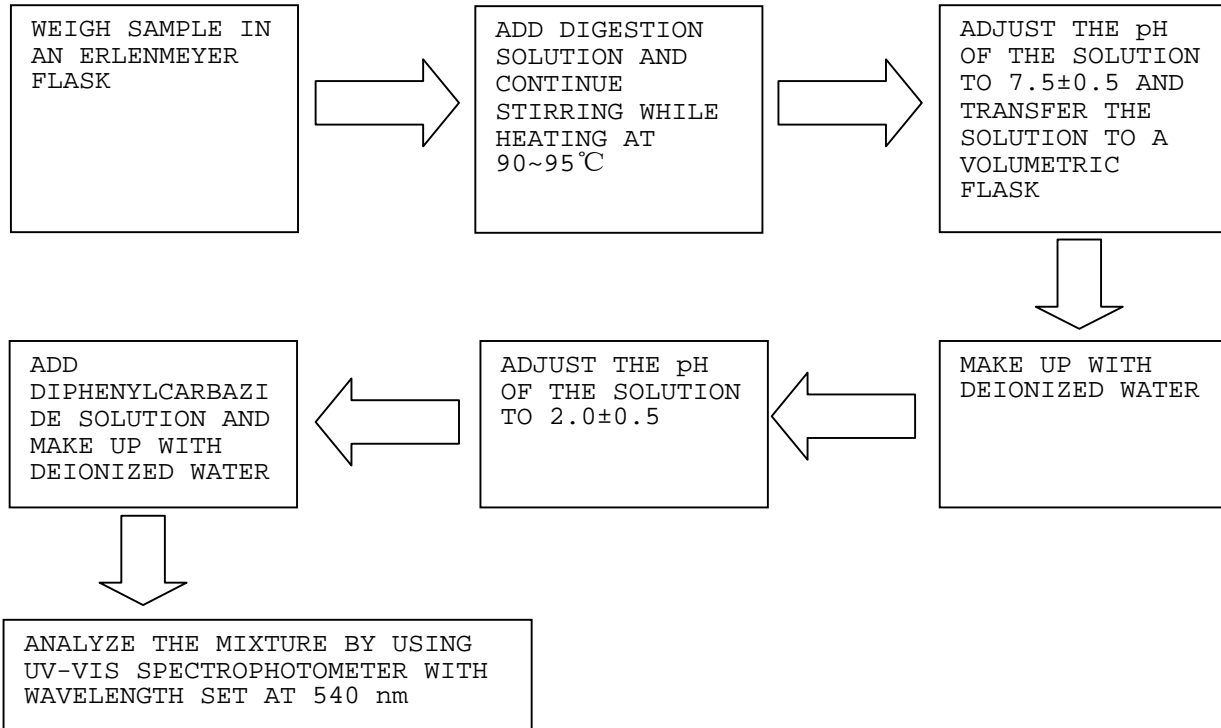


TEST REPORT

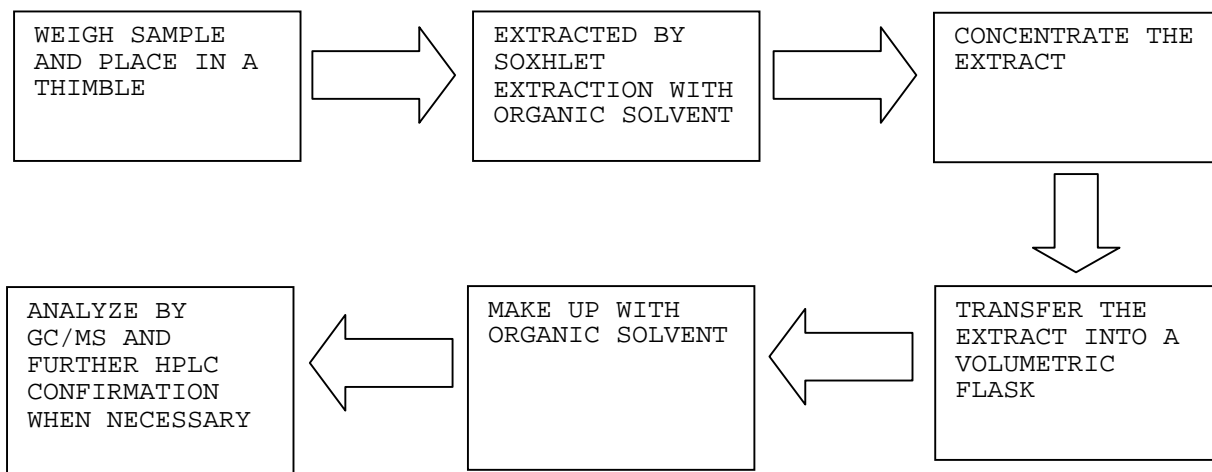
NUMBER: SZHH0049776103

TESTS CONDUCTED

3. TEST FOR CHROMIUM (VI) (Cr^{6+}) CONTENT (ALKALINE DIGESTION)



4. TEST FOR PBBs/PBDEs CONTENTS



END OF REPORT

Test Report

Report No. RLSHB000141620004

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Applicant SHANGHAI DAEJOO ELECTRONIC MATERIALS CO.,LTD

Address NO.3405,JINDU ROAD XINZHUANG INDUSTRIAL ESTATE,SHANGHAI,CHINA

Report on the submitted sample(s) said to be

Sample Name DS-PF-7180VR

Sample Description Gray paste (dry weight)

Part No. DS-PF-7180VR

Item/Lot No. 091016P

Material Ag

Buyer HP

Sample Received Date Oct. 17, 2009

Testing Period Oct. 17, 2009 to Oct. 21, 2009

Test Requested To determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I) contents in the submitted sample according to the request of client.

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).

Tested by


Chen Qian
Technical Manager

Inspected by

Zhang Yijun

Approved by

Date

Oct. 21, 2009

No. 94634777

Test Report

Report No. RLSHB000141620004

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Test Method

Test Item(s)	Pretreatment Method	Measured Equipment(s)	Report Limit
Lead(Pb)	IEC 62321:2008 Ed.1 Sec.10	ICP-OES	2mg/kg
Cadmium(Cd)	IEC 62321:2008 Ed.1 Sec.10	ICP-OES	2mg/kg
Mercury(Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis	2mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5mg/kg
Fluorine (F)	Refer to BS EN 14582:2007	IC	10mg/kg
Chlorine (Cl)	Refer to BS EN 14582:2007	IC	10mg/kg
Bromine (Br)	Refer to BS EN 14582:2007	IC	10mg/kg
Iodine (I)	Refer to BS EN 14582:2007	IC	10mg/kg

Test Result(s)

Tested Item(s)	Content
Lead(Pb)	10 mg/kg
Cadmium (Cd)	N.D.
Mercury(Hg)	N.D.
Hexavalent Chromium (Cr(VI))	N.D.

Tested Item(s)	Content
Polybrominated Biphenyls (PBBs)	
Monobromobiphenyl	N.D.
Dibromobiphenyl	N.D.
Tribromobiphenyl	N.D.
Tetrabromobiphenyl	N.D.
Pentabromobiphenyl	N.D.
Hexabromobiphenyl	N.D.
Heptabromobiphenyl	N.D.
Octabromobiphenyl	N.D.
Nonabromobiphenyl	N.D.
Decabromobiphenyl	N.D.

Test Report

Report No. RLSHB000141620004

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Tested Item(s)	Content
Polybrominated Diphenyl Ethers (PBDEs)	
Monobromodiphenyl ether	N.D.
Dibromodiphenyl ether	N.D.
Tribromodiphenyl ether	N.D.
Tetrabromodiphenyl ether	N.D.
Pentabromodiphenyl ether	N.D.
Hexabromodiphenyl ether	N.D.
Heptabromodiphenyl ether	N.D.
Octabromodiphenyl ether	N.D.
Nonabromodiphenyl ether	N.D.
Decabromodiphenyl ether	N.D.
Tested Item(s)	Content
Halogen(s)	
Fluorine (F)	N.D.
Chlorine (Cl)	N.D.
Bromine (Br)	N.D.
Iodine (I)	N.D.

Note: The sample had been dissolved totally tested for Lead, Mercury, Cadmium.

-N.D. = Not Detected (<Report Limit)

-mg/kg = ppm = parts per million

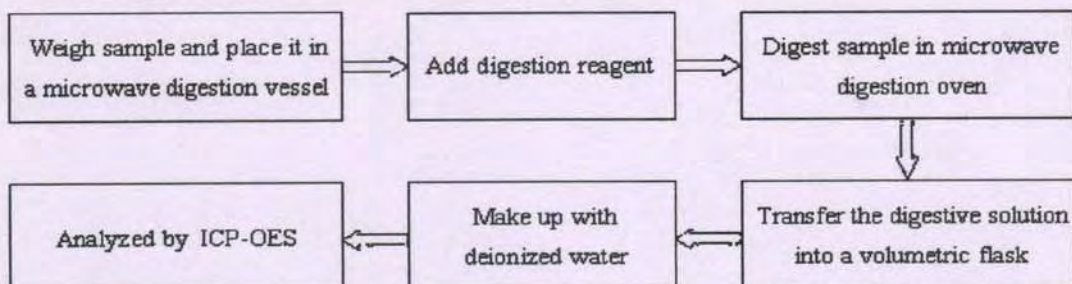
Test Report

Report No. RLSHB000141620004

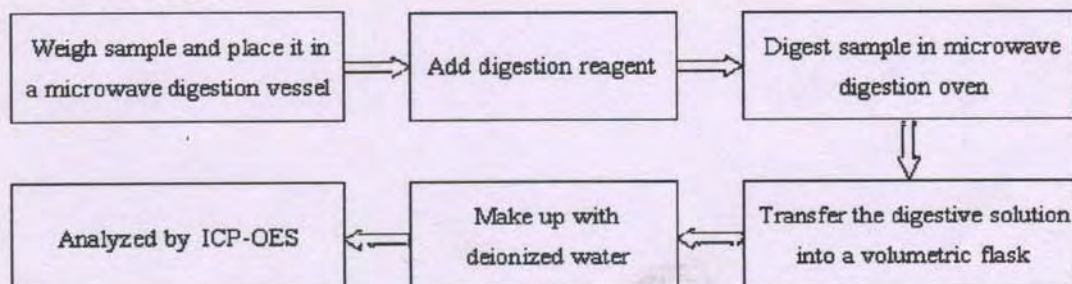
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Test Process

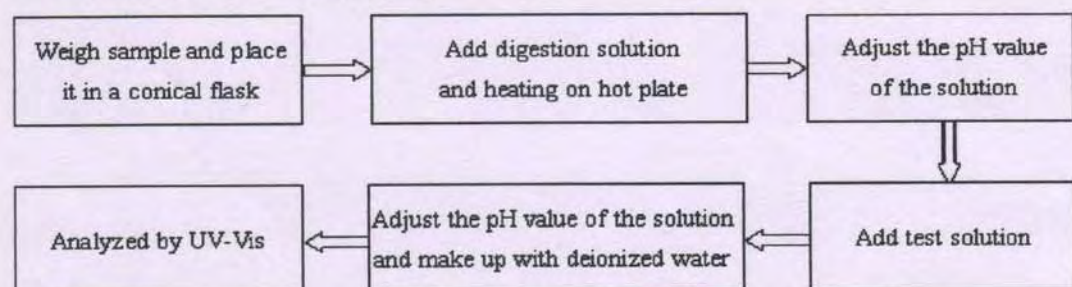
1. Lead(Pb), Cadmium(Cd)



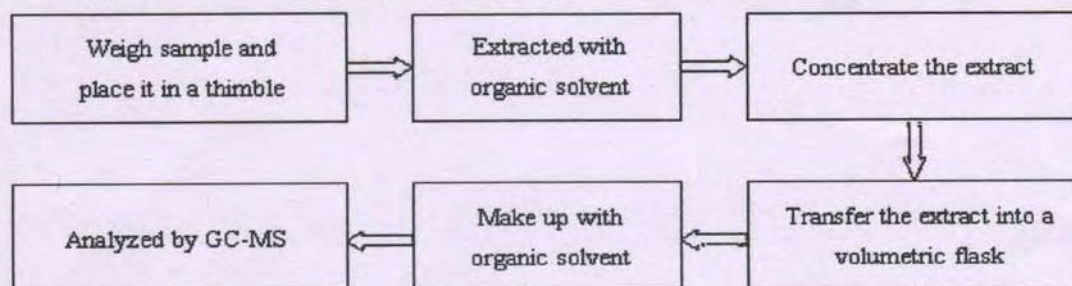
2. Mercury(Hg)



3. Hexavalent Chromium (Cr(VI))



4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)

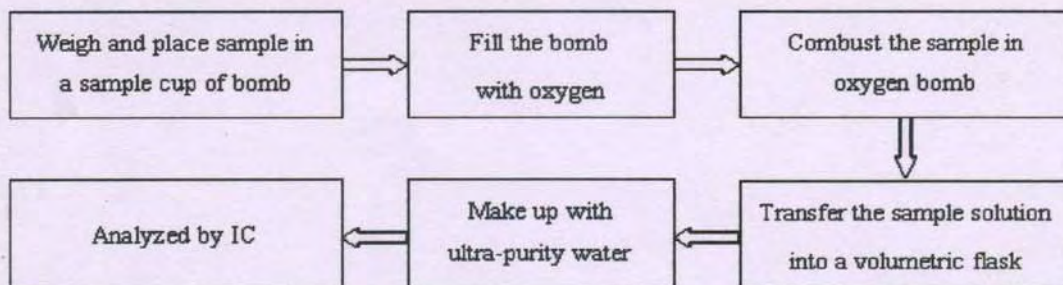


Test Report

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5. Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)



Test Report

Report No. RLSHB000141620004

Page 6 of 6

Photo(s) of the sample(s)



*** End of report ***

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4F., Building 15-3, 999 Ningqiao Road, Jinqiao, Pudong, Shanghai



Test Report

No. CANEC1000805811

Date: 15 Mar 2010

Page 1 of 5

DONGGUAN QI HANG XI YE MANUFACTURING CO.,LTD
NO.1 INDUSTRIAL PARK,XIAGANG,CHANGAN TOWN,DONGGUAN CITY
CHINA

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

LEAD-FREE SOLDER PASTE

SGS Job No. : 12409086 - GZ
Client Ref. Information : MIXTURE OF QH#LF96, QH#LF97, QH#LF98, QH#LF658, QH#LF601,
QH#LT658, QH#LT601, QH#LT658C, QH#LF96H, QH#LF97H,
QH#LF98H, QH#LF658H, QH#LF601H, QH#LT658H, QH#LT601H,
QH#LT658CH
Supplier : DONGGUAN QI HANG XI YE MANUFACTURING CO.,LTD
SGS Internal Reference No. : 13.11
Date of Sample Received : 09 Mar 2010
Testing Period : 09 Mar 2010 - 15 Mar 2010
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 sample(s), the results comply
with the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of
SGS-CSTC Ltd.

Manson Yang
Sr. Engineer

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SGS-CTC Standards Technical Services Co., Ltd.
Guangzhou Branch and Chemical Laboratory

198 Kezhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
中国·广州·经济技术开发区科学城科珠路198号

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邮编: 510663 t (86-20) 82155555 f (86-20) 82075113 e sgs.china@sgs.com

GZCM 3716446

Member of the SGS Group (SGS SA)

Test Report

No. CANEC1000805811

Date: 15 Mar 2010

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Test Results:

ID for specimen 1 : CAN10-008058.011
Description for specimen 1 : Grey paste

RoHS Directive 2002/95/EC

Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
Cadmium (Cd)	mg/kg	IEC 62321:2008, ICP-OES	N.D.	2	100
Lead (Pb)	mg/kg	IEC 62321:2008, ICP-OES	66	2	1000
Mercury (Hg)	mg/kg	IEC 62321:2008, ICP-OES	N.D.	2	1000
Hexavalent Chromium (CrVI) by alkaline extraction	mg/kg	IEC 62321:2008, UV-Vis	N.D.	2	1000
Sum of PBBs	mg/kg	-	N.D.	-	1000
Monobromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Dibromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Tribromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Tetrabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Pentabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Hexabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Heptabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Octabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Nonabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Decabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Sum of PBDEs	mg/kg	-	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Dibromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Tribromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Tetrabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Pentabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Hexabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Heptabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Octabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Nonabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	
Decabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5	

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. "-" = Not regulated

Remark : The result(s) shown is/are of the total weight of dried sample.

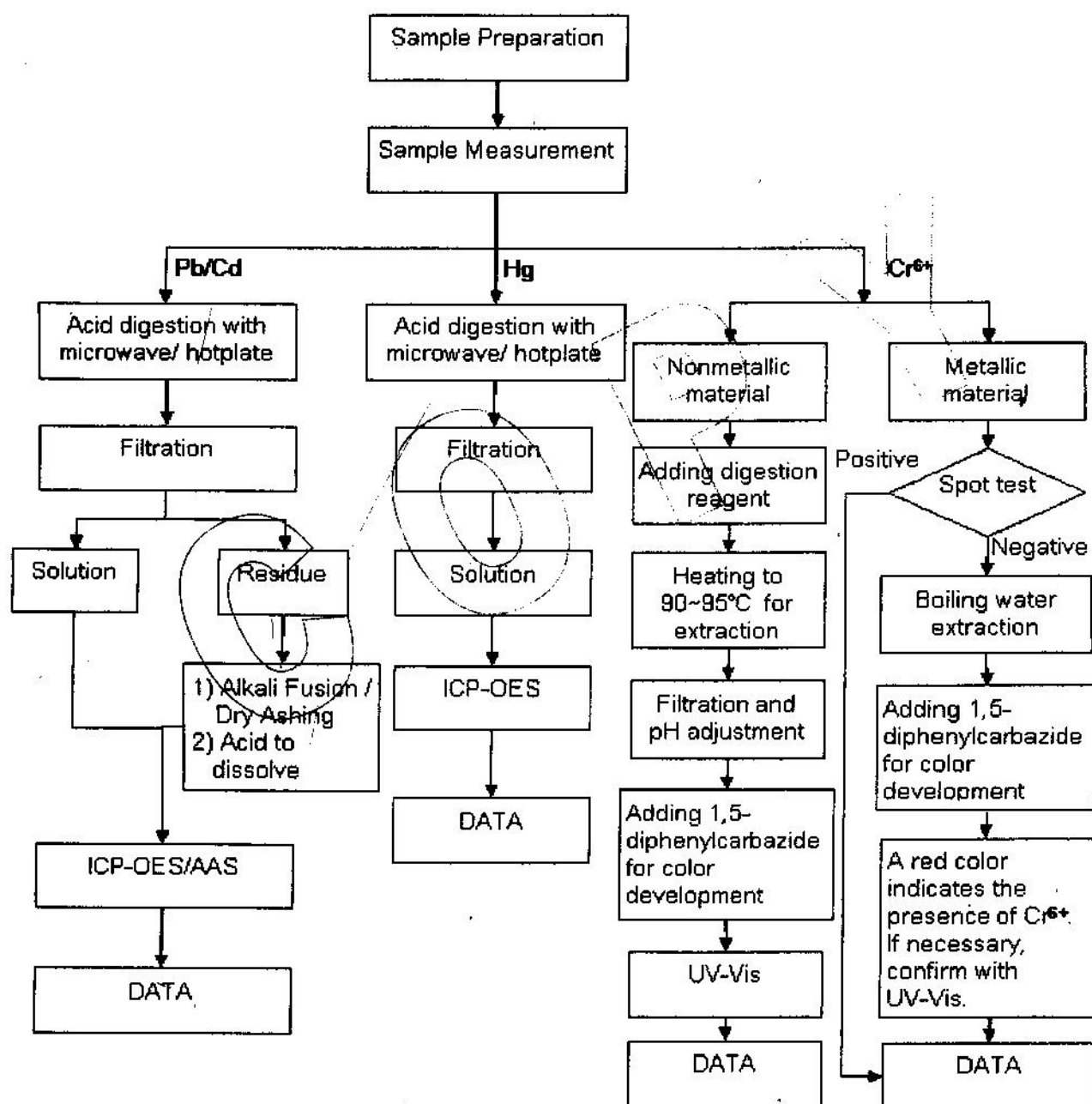
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ATTACHMENTS

Testing Flow Chart

- 1) Name of the person who made measurement: Bella Wang
- 2) Name of the person in charge of measurement: Adams Yu

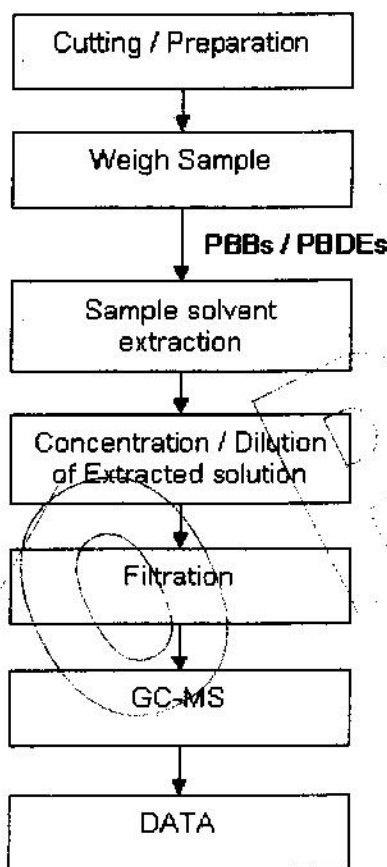


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Testing Flow Chart

- 1) Name of the person who made measurement: Tina Zhao
- 2) Name of the person in charge of measurement: Ryan Yang



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198 Kaifu Road, Science Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663

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GZCM 3716449

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***

GO

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Guangzhou Chemical Laboratory

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GZCM 3716450



Test Report

No. CANEC1000805812

Date: 15 Mar 2010

Page 1 of 4

DONGGUAN QI HANG XI YE MANUFACTURING CO.,LTD
NO.1 INDUSTRIAL PARK,XIAGANG,CHANGAN TOWN,DONGGUAN CITY
CHINA

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

LEAD-FREE SOLDER PASTE

SGS Job No. : 12409086 - GZ
Client Ref. Information : MIXTURE OF QH#LF96H, QH#LF97H, QH#LF98H, QH#LF658H,
QH#LF601H, QH#LT658H, QH#LT601H, QH#LT658CH
Supplier : DONGGUAN QI HANG XI YE MANUFACTURING CO.,LTD
SGS Internal Reference No. : 13.12
Date of Sample Received : 09 Mar 2010
Testing Period : 09 Mar 2010 - 15 Mar 2010
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.


Manson Yang
Sr. Engineer

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SGS Standards Technical Services Co., Ltd.
Guangzhou Chemical Laboratory

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GZCM 3716461

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Test Report

No. CANEC1000805812

Date: 15 Mar 2010

Page 2 of 4

Test Results:

ID for specimen 1 : CAN10-008058.012
Description for specimen 1 : Grey paste

Halogen

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Fluorine (F)	mg/kg	BS EN 14582:2007, IC	N.D.	50
Chlorine (Cl)	mg/kg	BS EN 14582:2007, IC	N.D.	50
Bromine (Br)	mg/kg	BS EN 14582:2007, IC	N.D.	50
Iodine (I)	mg/kg	BS EN 14582:2007, IC	N.D.	50

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit

Remark : The result(s) shown is/are of the total weight of wet sample.

GO P

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Guangzhou Testing Center Chemical Laboratory

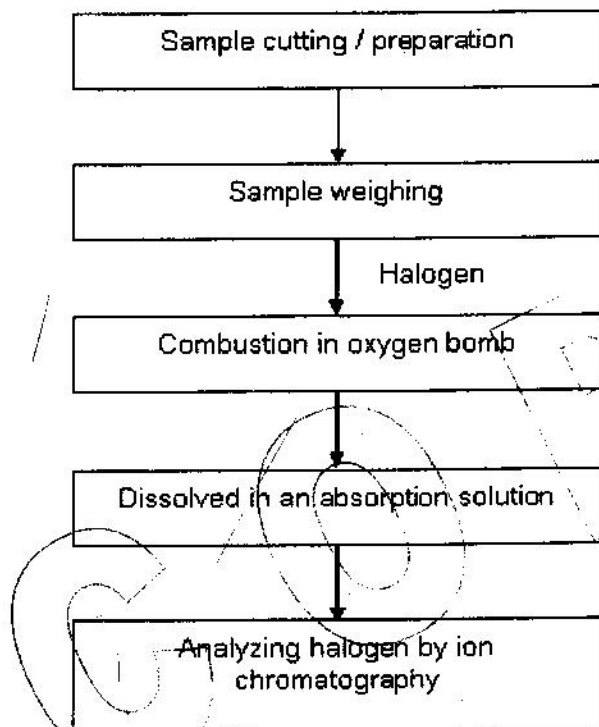
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GZCM 3716452

ATTACHMENTS

Testing Flow Chart

- 1) Name of the person who made measurement: Sawen, Chen
- 2) Name of the person in charge of measurement: Michael Tso



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GZCM 3716453

Sample photo:



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Guangzhou Branch / Chemical Laboratory

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GZCM 3716454



Test Report

No. CANEC0904904504

Date: 28 Sep 2009

Page 1 of 4

BRISTRIP LIMITED

JUQI ADMINISTRATION ZONE HUMEN TOWN DONGGUAN CITY GUANGDONG PROVINCE
CHINA

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

CU C2680

SGS Job No. : 12179787 - GZ
SGS Internal Reference No. : 7.4
Date of Sample Received : 24 Sep 2009
Testing Period : 24 Sep 2009 - 28 Sep 2009

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 sample(s), the results **comply**
with the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of
SGS-CSTC Ltd.

Sunny Huang
Lab Sr. Supervisor



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Test Report

No. CANEC0904904504

Date: 28 Sep 2009

Page 2 of 4

Test Results:

ID for specimen 1 : CAN09-049045.004
Description for specimen 1 : Brassy metal sheet

RoHS Directive 2002/95/EC

Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
Cadmium (Cd)	mg/kg	IEC 62321:2008, ICP-OES	N.D.	2	100
Lead (Pb)	mg/kg	IEC 62321:2008, ICP-OES	16	2	1000
Mercury (Hg)	mg/kg	IEC 62321:2008, ICP-OES	N.D.	2	1000
Hexavalent Chromium (CrVI) by boiling water extraction	-	IEC 62321:2008, UV-Vis	Negative	◇	#

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. ◇ = Spot-Test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result is negative or cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of CrVI coating

Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

Storage conditions and production date of the tested sample are unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.

5. # = Positive indicates the presence of CrVI on the tested areas.

Negative indicates the absence of CrVI on the tested areas.

6. "-" = Not regulated

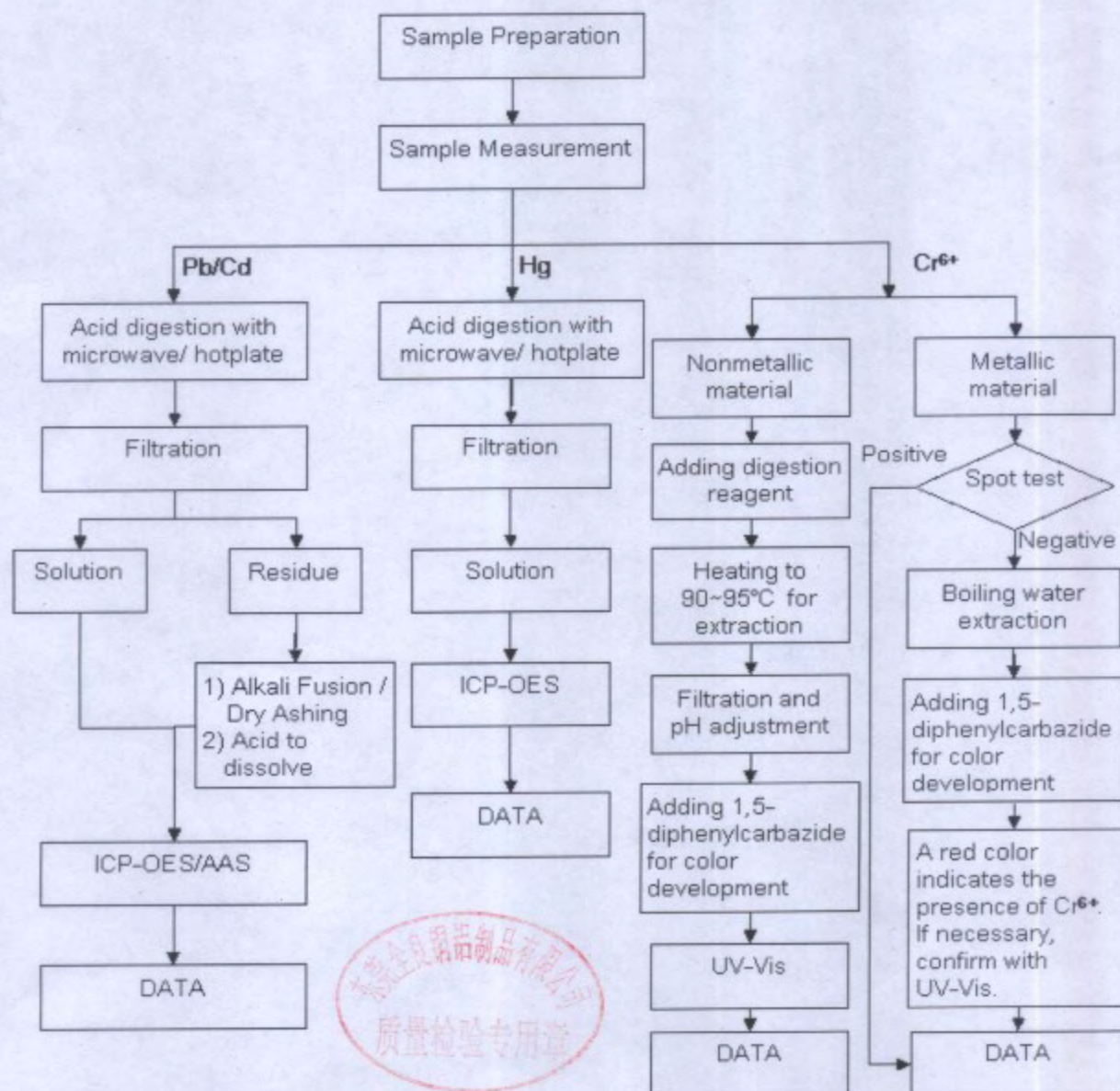


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ATTACHMENTS

Testing Flow Chart

- 1) Name of the person who made measurement: Luke Xu / Lily Lee
- 2) Name of the person in charge of measurement: Adams Yu / Leo Wang
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr⁶⁺ test method excluded).



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Test Report

No. CANEC0904904504

Date: 28 Sep 2009

Page 4 of 4

Sample photo:



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DONGGUAN DAEJOO ELECTRONIC MATERIALS CO.,LTD.
XIANYONG INDUSTRIAL ZONE, WANJIANG DISTRICT, DONGGUAN CITY, GUANGDONG PROVINCE
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as :
GP-930-1HF RD

SGS Job No.	:	12247323 - GZ
Date of Sample Received	:	09 Nov 2009
Testing Period	:	09 Nov 2009 - 11 Nov 2009
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.

Manson

Manson Yang
Sr. Engineer

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Test Report

No. CANEC0905509701

Date: 12 Nov 2009

Page 2 of 7

Test Results:

ID for specimen 1 : CAN09-055097.001

Description for specimen 1 : Red solid material

Elementary Analysis

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Cadmium (Cd)	mg/kg	IEC 62321:2008, ICP-OES	N.D.	2
Lead (Pb)	mg/kg	IEC 62321:2008, ICP-OES	N.D.	2
Mercury (Hg)	mg/kg	IEC 62321:2008, ICP-OES	N.D.	2
Hexavalent Chromium (CrVI) by alkaline extraction	mg/kg	IEC 62321:2008, UV-Vis	N.D.	2

Note:

1. mg/kg = ppm

2. N.D. = Not Detected (< MDL)

3. MDL = Method Detection Limit

Flame Retardants

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Sum of PBBs	mg/kg	-	N.D.	-
Monobromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Dibromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Tribromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Tetrabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Pentabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Hexabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Heptabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Octabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Nonabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Decabromobiphenyl	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Sum of PBDEs	mg/kg	-	N.D.	-
Monobromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Dibromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Tribromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Tetrabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Pentabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Hexabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Heptabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Octabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Nonabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5
Decabromodiphenyl ether	mg/kg	IEC 62321:2008, GC-MS	N.D.	5

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Test Report

No. CANEC0905509701

Date: 12 Nov 2009

Page 3 of 7

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. "-" = Not regulated

Halogen

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Fluorine (F)	mg/kg	BS EN 14582:2007, IC	N.D.	50
Chlorine (Cl)	mg/kg	BS EN 14582:2007, IC	285	50
Bromine (Br)	mg/kg	BS EN 14582:2007, IC	177	50
Iodine (I)	mg/kg	BS EN 14582:2007, IC	N.D.	50

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit

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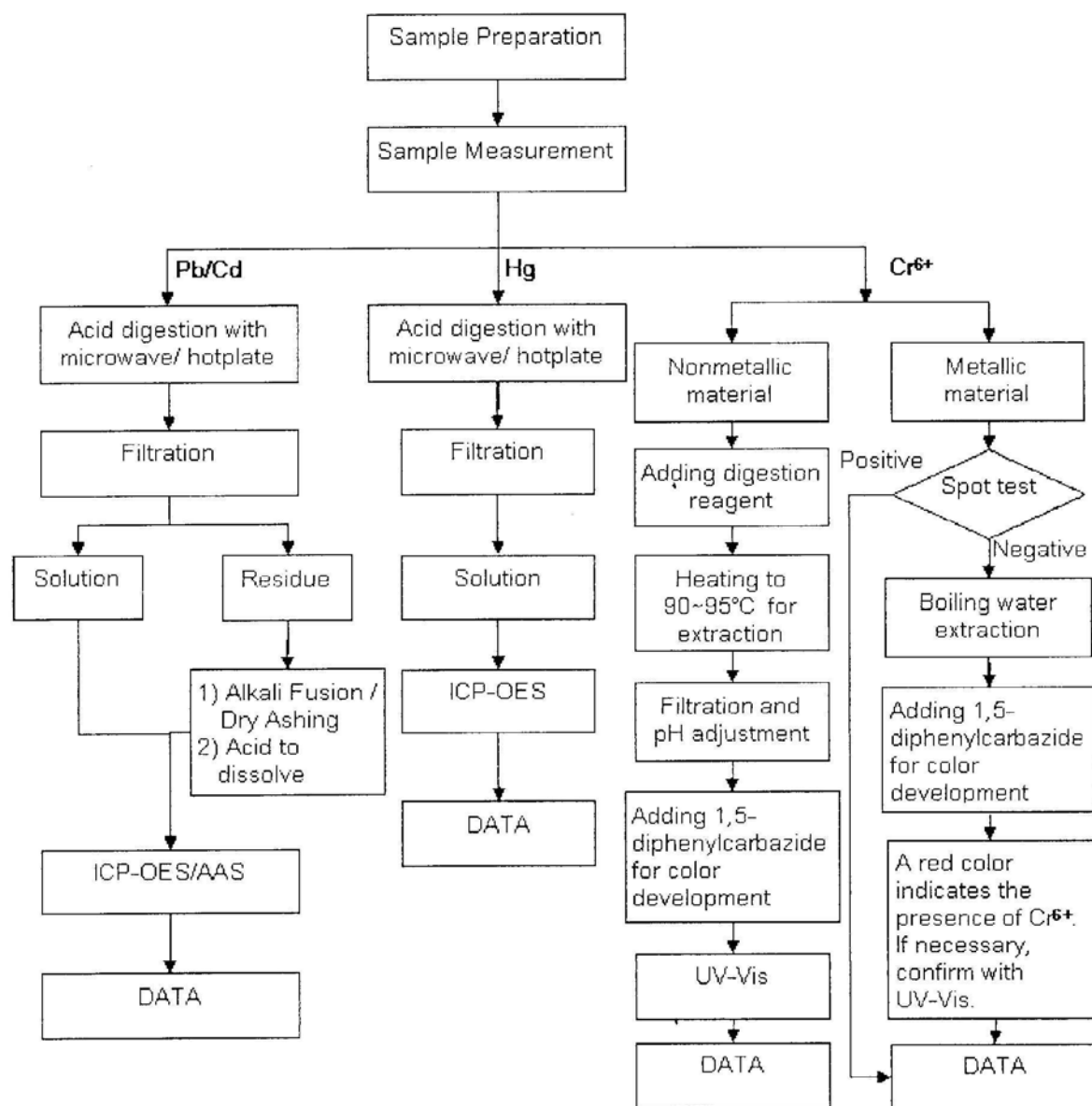
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ATTACHMENTS

Testing Flow Chart

- 1) Name of the person who made measurement: Luke Xu / Lily Lee
- 2) Name of the person in charge of measurement: Adams Yu / Leo Wang
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr⁶⁺ test method excluded) .

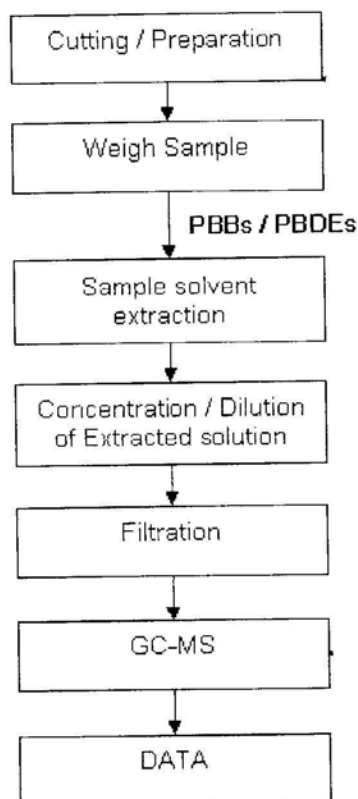


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Testing Flow Chart

- 1) Name of the person who made measurement: Lina Tang
- 2) Name of the person in charge of measurement: Tina Zhao



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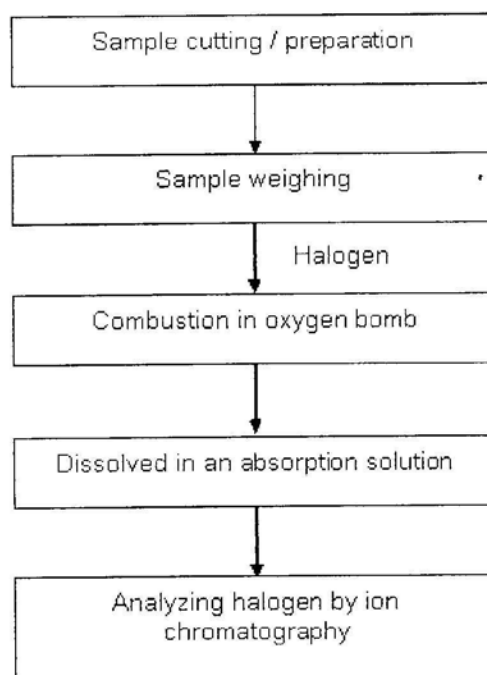
Date: 12 Nov 2009

Page 6 of 7

ATTACHMENTS

Testing Flow Chart

- 1) Name of the person who made measurement: Sawen, Chen
- 2) Name of the person in charge of measurement: Michael Tso



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