

No.: CE/2007/A4666 Date: 2007/10/29 Page: 2 of 4

LANTERRA INDUSTRIAL CO., LTD. F. 14, NO. 92, SHING TEH RD., SAN CHUNG CITY, TAIPEL TAIWAN Test results by chemical method (Unit: mg/kg)

Test Item (s):	Method	Result	MDL	RoH <b>S</b> Limit
	(Refer to)	No.1	MILL	
Cadmium (Cd)	(1)	n.d.	2	100
Lead (Pb)	(2)	n.d.	2	1000
Mercury (Hg)	(3)	n.d.	2	1000
Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	(4)	Negative	See Note 4	#

#### TEST PART DESCRIPTION:

SILVER COLORED METAL WIRE

Note: 1. mg/kg = ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. Spot-test:

Negative = Absence of Cr(VI) coating / surface layer,

Positive = Presence of Cr(VI) coating / surface layer;

(The tested sample should be further verified by boiling-water-extraction method if the

spot test result cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of Cr(VI) coating / surface layer.

Positive = Presence of Cr(VI) coating / surface layer;

the detected concentration in boiling-water-extraction solution is equal or greater

than 0.02 mg/kg with 50 cm<sup>2</sup> sample surface area.

5. # = Positive indicates the presence of Cr(VI) on the tested areas

and result be regarded as not comply with RoHS requirement.

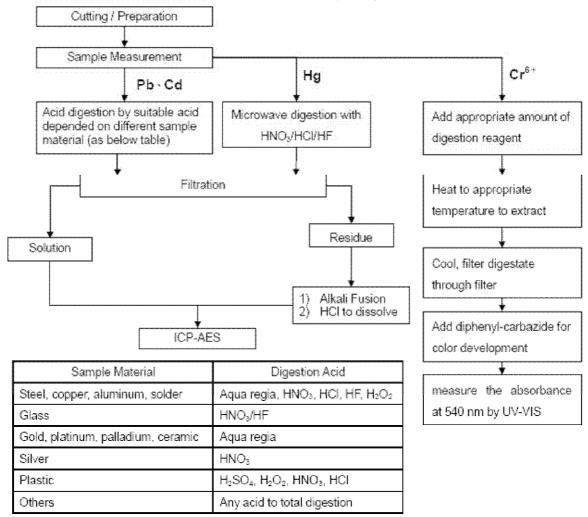
Negative indicates the absence of Cr(VI) on the tested areas and result be regarded as comply with RoHS requirement.



No.: CE/2007/A4666 Date: 2007/10/29 Page: 3 of 4

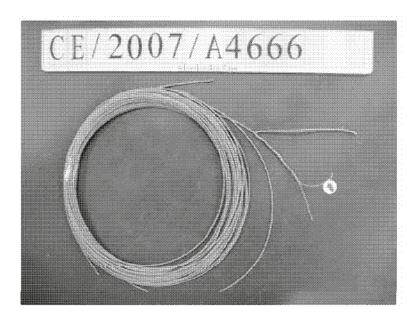
LANTERRA INDUSTRIAL CO., LTD. F. 14, NO. 92, SHING TEH RD., SAN CHUNG CITY, TAIPEI, TAIWAN 

- 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: Troy Chang
- 3) Name of the person in charge of measurement: Chenyu Kung





No.: CE/2007/A4666 Date: 2007/10/29 Page: 4 of 4

LANTERRA INDUSTRIAL CO., LTD. F. 14, NO. 92, SHING TEH RD., SAN CHUNG CITY, TAIPEI, TAIWAN 

\*\* End of Report \*\*



**Test Report** No. : CE/2008/B1636 Date : 2008/11/14

Page: 1 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



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

Sample Description KHCX-32-SB-TA Style/Item No. KHCX-32-SB-TA

Sample Receiving Date 2008/11/07

**Testing Period** 2008/11/07 TO 2008/11/14

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



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。



No.: CE/2008/B1636 Date: 2008/11/14 Page: 2 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



#### Test Result(s)

PART NAME NO.1 **BLACK PLASTIC JACKET** 

Took Home (a):	11:4	Mothod	MDL	Result
Test Item (s):	Unit	Method	MDL	No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.	2	n.d.
Perfluorooctane sulfonates (PFOS) PFOS – Acid PFOS – Metal Salt PFOS – Amide	mg/kg	With reference to US EPA 3540C: 1996 method for PFOS Content. Analysis was performed by LC/MS.	10	n.d.
PFOA	mg/kg	With reference to US EPA 3540C: 1996 method for PFOA Content. Analysis was performed by LC/MS.	10	n.d.
Sum of PBBs			-	n.d.
Monobromobiphenyl			5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl			5	n.d.
Tetrabromobiphenyl		With reference to IEC 62321/2nd	5	n.d.
Pentabromobiphenyl	mg/kg	CDV (111/95/CDV). Determination	5	n.d.
Hexabromobiphenyl		of PBB and PBDE by GC/MS.	5	n.d.
Heptabromobiphenyl			5	n.d.
Octabromobiphenyl		[	5	n.d.
Nonabromobiphenyl			5	n.d.
Decabromobiphenyl			5	n.d.

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No.: CE/2008/B1636 Date: 2008/11/14 Page: 3 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



Test Item (s): Un	Unit	Method	MDL	Result
rest item (s).	Onit			No.1
Sum of PBDEs			-	n.d.
Monobromodiphenyl ether	]		5	n.d.
Dibromodiphenyl ether	]		5	n.d.
Tribromodiphenyl ether	-		5	n.d.
Tetrabromodiphenyl ether			5	n.d.
Pentabromodiphenyl ether	mg/kg		5	n.d.
Hexabromodiphenyl ether	]	of PBB and PBDE by GC/MS.	5	n.d.
Heptabromodiphenyl ether			5	n.d.
Octabromodiphenyl ether			5	n.d.
Nonabromodiphenyl ether			5	n.d.
Decabromodiphenyl ether			5	n.d.

Note : 1. mg/kg = ppm ; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. " - " = Not Regulated

#### PFOS Reference Information: Directive 2006/122/EC

- (1) May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0.005 % by mass.
- (2) May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0.1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1µg/m<sup>2</sup> of the coated material.

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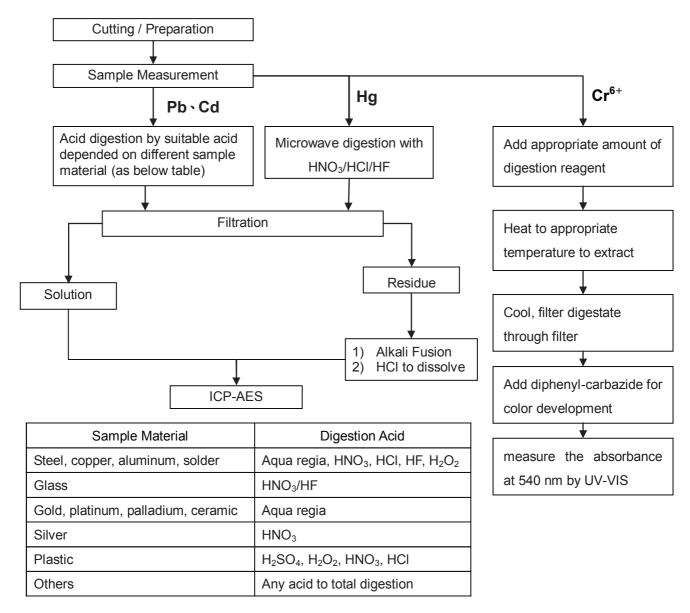


No.: CE/2008/B1636 Date: 2008/11/14 Page: 4 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Climbgreat Yang
- 3) Name of the person in charge of measurement: Troy Chang



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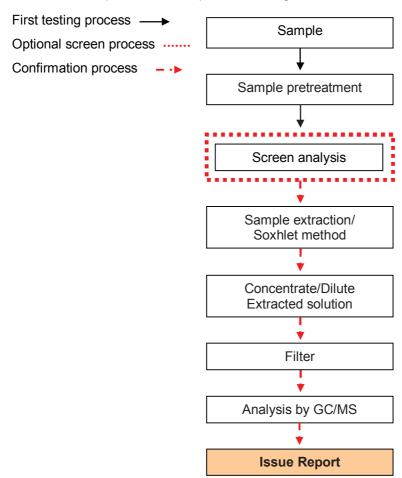
No.: CE/2008/B1636 Date: 2008/11/14 Page: 5 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



### PBB/PBDE analytical FLOW CHART

- 1) Name of the person who made measurement: Roman Wong
- 2) Name of the person in charge of measurement: Shinjyh Chen



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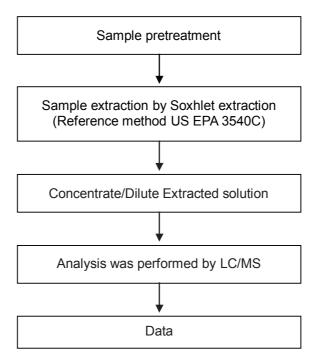
No.: CE/2008/B1636 Date: 2008/11/14 Page: 6 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



### Analytical flow chart of PFOA/PFOS content

- 1) Name of the person who made measurement: Carrie Liu
- 2) Name of the person in charge of measurement: Shinjyh Chen



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No.: CE/2008/B1636 Date: 2008/11/14 Page: 7 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN





\*\* End of Report \*\*

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No. : CE/2008/B1640 Date : 2008/11/14 Page: 1 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



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

Sample Description KHCX-32-SB-TA Style/Item No. KHCX-32-SB-TA

Sample Receiving Date 2008/11/07

2008/11/07 TO 2008/11/14 **Testing Period** 

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



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No.: CE/2008/B1640 Date: 2008/11/14 Page: 2 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



#### Test Result(s)

SILVER COLORED METAL FOIL PART NAME NO.1

Tost Itom (s):	Test Item (s): Unit Method		MDL	Result
rest item (s).	Ollit	Wethou	MIDL	No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	**	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for metallic samples by Spot test / boiling water extraction Method. (See Note 5)	0.02mg/kg with 50 cm <sup>2</sup> surface area	Negative
Perfluorooctane sulfonates (PFOS) PFOS – Acid PFOS – Metal Salt PFOS – Amide	mg/kg	With reference to US EPA 3540C: 1996 method for PFOS Content. Analysis was performed by LC/MS.	10	n.d.
PFOA	mg/kg	With reference to US EPA 3540C: 1996 method for PFOA Content. Analysis was performed by LC/MS.	10	n.d.

Note: 1. mg/kg = ppm; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. \*\* = Qualitative analysis (No Unit)

5. Spot-test:

Negative = Absence of Cr(VI) coating / surface layer,

Positive = Presence of Cr(VI) coating / surface layer;

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

Boiling-water-extraction:

Negative = Absence of Cr(VI) coating / surface layer.

Positive = Presence of Cr(VI) coating / surface layer;

the detected concentration in boiling-water-extraction solution is equal or greater

than 0.02 mg/kg with 50 cm<sup>2</sup> sample surface area.

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No.: CE/2008/B1640 Date: 2008/11/14 Page: 3 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



#### PFOS Reference Information: Directive 2006/122/EC

- (1) May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0.005 % by mass.
- (2) May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0.1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1µg/m<sup>2</sup> of the coated material.

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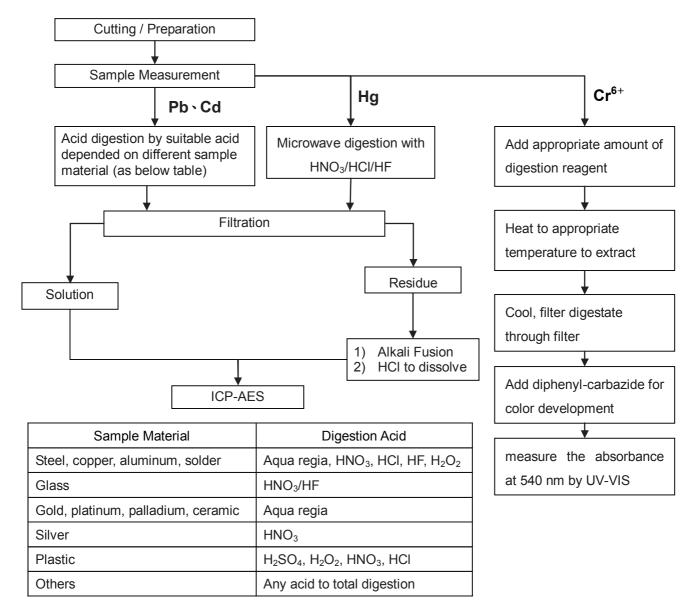


No. : CE/2008/B1640 Date : 2008/11/14 Page: 4 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Climbgreat Yang
- 3) Name of the person in charge of measurement: Troy Chang



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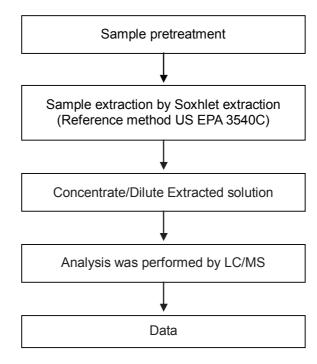
No. : CE/2008/B1640 Date : 2008/11/14 Page : 5 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



### Analytical flow chart of PFOA/PFOS content

- 1) Name of the person who made measurement: Carrie Liu
- 2) Name of the person in charge of measurement: Shinjyh Chen



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No.: CE/2008/B1640 Date: 2008/11/14 Page: 6 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN





\*\* End of Report \*\*

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**Test Report** No. : CE/2008/B1639 Date : 2008/11/14

Page: 1 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



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

Sample Description KHCX-32-SB-TA Style/Item No. KHCX-32-SB-TA

Sample Receiving Date 2008/11/07

**Testing Period** 2008/11/07 TO 2008/11/14

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



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No.: CE/2008/B1639 Date: 2008/11/14 Page: 2 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



#### Test Result(s)

TRANSPARENT PLASTIC PART NAME NO.1

Took Home (a):	11:4	Mothod	MDL	Result
Test Item (s):	Unit	Method	MDL	No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.	2	n.d.
Perfluorooctane sulfonates (PFOS) PFOS – Acid PFOS – Metal Salt PFOS – Amide	mg/kg	With reference to US EPA 3540C: 1996 method for PFOS Content. Analysis was performed by LC/MS.	10	n.d.
PFOA	mg/kg	With reference to US EPA 3540C: 1996 method for PFOA Content. Analysis was performed by LC/MS.	10	n.d.
Sum of PBBs			-	n.d.
Monobromobiphenyl			5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl			5	n.d.
Tetrabromobiphenyl		With reference to IEC 62321/2nd	5	n.d.
Pentabromobiphenyl	mg/kg	CDV (111/95/CDV). Determination	5	n.d.
Hexabromobiphenyl		of PBB and PBDE by GC/MS.	5	n.d.
Heptabromobiphenyl			5	n.d.
Octabromobiphenyl		[	5	n.d.
Nonabromobiphenyl			5	n.d.
Decabromobiphenyl			5	n.d.

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No.: CE/2008/B1639 Date: 2008/11/14 Page: 3 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



Test Item (s):	Unit	Method	MDL	Result
rest item (s).	Oilit			No.1
Sum of PBDEs			-	n.d.
Monobromodiphenyl ether	1		5	n.d.
Dibromodiphenyl ether	mg/kg		5	n.d.
Tribromodiphenyl ether			5	n.d.
Tetrabromodiphenyl ether		With reference to IEC 62321/2nd	5	n.d.
Pentabromodiphenyl ether		CDV (111/95/CDV). Determination	5 5	n.d.
Hexabromodiphenyl ether	]	of PBB and PBDE by GC/MS.		n.d.
Heptabromodiphenyl ether	]		5	n.d.
Octabromodiphenyl ether			5	n.d.
Nonabromodiphenyl ether			5	n.d.
Decabromodiphenyl ether			5	n.d.

Note : 1. mg/kg = ppm ; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. " - " = Not Regulated

#### PFOS Reference Information: Directive 2006/122/EC

- (1) May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0.005 % by mass.
- (2) May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0.1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1µg/m<sup>2</sup> of the coated material.

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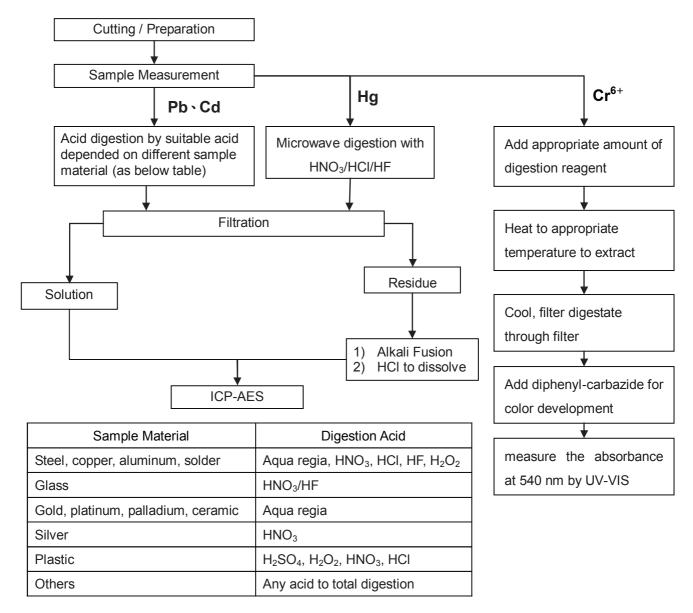


No.: CE/2008/B1639 Date: 2008/11/14 Page: 4 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Climbgreat Yang
- 3) Name of the person in charge of measurement: Troy Chang



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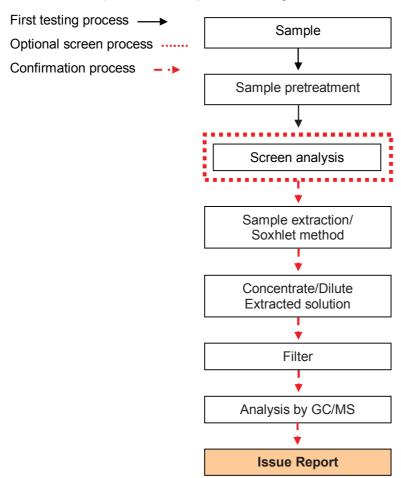
No.: CE/2008/B1639 Date: 2008/11/14 Page: 5 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



### PBB/PBDE analytical FLOW CHART

- 1) Name of the person who made measurement: Roman Wong
- 2) Name of the person in charge of measurement: Shinjyh Chen



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。



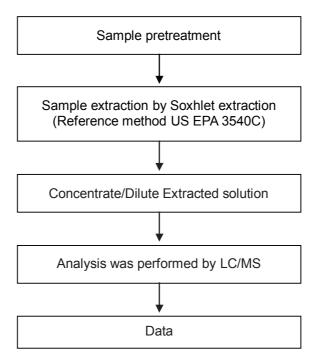
No.: CE/2008/B1639 Date: 2008/11/14 Page: 6 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



### Analytical flow chart of PFOA/PFOS content

- 1) Name of the person who made measurement: Carrie Liu
- 2) Name of the person in charge of measurement: Shinjyh Chen



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No.: CE/2008/B1639 Date: 2008/11/14 Page: 7 of 7

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN





\*\* End of Report \*\*

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No. : CE/2008/B1641 Date : 2008/11/14 Page: 1 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



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

Sample Description KHCX-32-SB-TA Style/Item No. KHCX-32-SB-TA

Sample Receiving Date 2008/11/07

2008/11/07 TO 2008/11/14 **Testing Period** 

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



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。



Date: 2008/11/14 Page: 2 of 6 No.: CE/2008/B1641

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



#### Test Result(s)

SILVER COLORED METAL WIRE PART NAME NO.1

Tost Itom (s):	Test Item (s): Unit Method	Mathod	MDL	Result
rest item (s).	Ollit	Wethou	MDL	No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	**	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for metallic samples by Spot test / boiling water extraction Method. (See Note 5)	0.02mg/kg with 50 cm <sup>2</sup> surface area	Negative
Perfluorooctane sulfonates (PFOS) PFOS – Acid PFOS – Metal Salt PFOS – Amide	mg/kg	With reference to US EPA 3540C: 1996 method for PFOS Content. Analysis was performed by LC/MS.	10	n.d.
PFOA	mg/kg	With reference to US EPA 3540C: 1996 method for PFOA Content. Analysis was performed by LC/MS.	10	n.d.

Note: 1. mg/kg = ppm; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. \*\* = Qualitative analysis (No Unit)

5. Spot-test:

Negative = Absence of Cr(VI) coating / surface layer,

Positive = Presence of Cr(VI) coating / surface layer;

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

Boiling-water-extraction:

Negative = Absence of Cr(VI) coating / surface layer.

Positive = Presence of Cr(VI) coating / surface layer;

the detected concentration in boiling-water-extraction solution is equal or greater

than 0.02 mg/kg with 50 cm<sup>2</sup> sample surface area.

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No.: CE/2008/B1641 Date: 2008/11/14 Page: 3 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



#### PFOS Reference Information: Directive 2006/122/EC

- (1) May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0.005 % by mass.
- (2) May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0.1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1µg/m<sup>2</sup> of the coated material.

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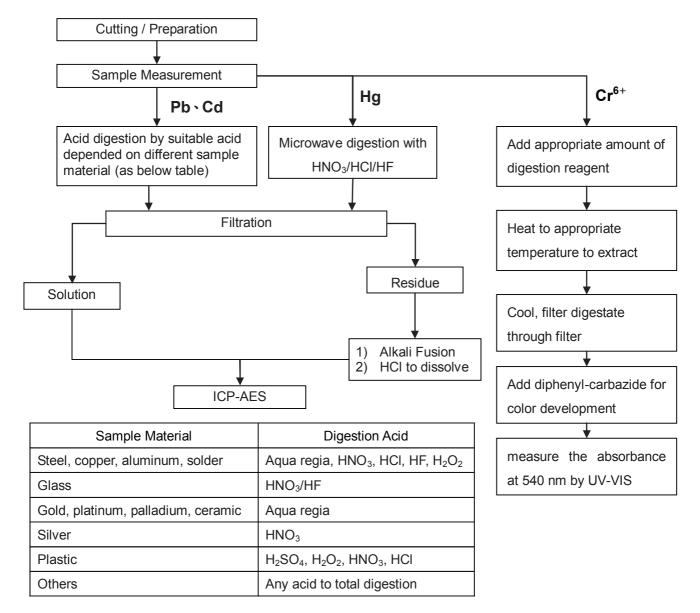


No.: CE/2008/B1641 Date: 2008/11/14 Page: 4 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Climbgreat Yang
- 3) Name of the person in charge of measurement: Troy Chang



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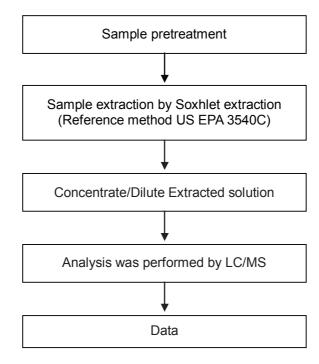
No.: CE/2008/B1641 Date: 2008/11/14 Page: 5 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN



### Analytical flow chart of PFOA/PFOS content

- 1) Name of the person who made measurement: Carrie Liu
- 2) Name of the person in charge of measurement: Shinjyh Chen



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。



No.: CE/2008/B1641 Date: 2008/11/14 Page: 6 of 6

SWCC SHOWA CABLE SYSTEMS CO., LTD. INTERCONNECTION UNIT NO. 4-1-1, MINAMI-HASHIMOTO, SAGAMIHARA-SHI, KANAGAWA, 229-1133, JAPAN





\*\* End of Report \*\*

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。

#### **SGS REPORT**

## **SUBJECT: Survey for Environmental-Related Substances**

### I-PEX Co.,Ltd.Japan

This ia applied for the following products:

I-PEX Product Name	I-PEX Part Number
MHF PLUG Connector	20278-111R-08 20278-111R-13 20278-111R-32 20278-111R-18 20351-111R-37

### Attachment:

Survey Form on Environmental Impact Substances Contained in Parts and Materials SGS TEST REPORT for MHF PLUG connector

Please refer to the attached SGS REPORT.

Component name	SGS Report No.
HOUSING-Black	CE_2008_31207
HOUSING-White	CE_2008_31209
CONTACT	CE_2008_31217
GROUND CONTACT	CE_2008_31216

Remark:\* The SGS Test Report can be applied to a component.

Rev.2

I-PEX Co.,Ltd.

Sheet 1 of 1



**Test Report** No. : CE/2008/31207 Date : 2008/03/10 Page: 1 of 10

I-PEX JP CO., LTD. 

6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

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

Sample Description MHF PLUG HOUSING

Style/Item No. 1844-011 Sample Receiving Date 2008/03/05

**Testing Period** 2008/03/05 TO 2008/03/10

\_\_\_\_\_\_

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





No.: CE/2008/31207 Date: 2008/03/10 Page: 2 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

### Test Result(s)

PART NAME NO.1 **BLACK PLASTIC** 

Test Item (s):	Unit	Method	MDL	Result
rest item (s).	Offic	Wetilod	IVIDL	No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	23
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.	2	n.d.
Antimony (Sb)	mg/kg	With reference to US EPA Method 3050B for Antimony Content. Analysis was performed by ICP-AES.	2	43800
Antimony trioxide (Sb <sub>2</sub> O <sub>3</sub> )	mg/kg	With reference to US EPA Method 3050B for Antimony Content. Analysis was performed by ICP-AES. (See Note 7)	2.4	52433
PFOA	mg/kg	With reference to US EPA 3540C: 1996 method for PFOA Content. Analysis was performed by LC/MS.	1	n.d.



No. : CE/2008/31207 Date : 2008/03/10 Page: 3 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Test Item (s):	Unit	Method	MDL	Result
` '	Offic			No.1
PFOS	mg/kg	With reference to US EPA	1	n.d.
		3540C : 1996 method for PFOS		
		Content. Analysis was		
Sum of PBBs		performed by LC/MS.		n.d.
	ļ		-	
Monobromobiphenyl	ļ		5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl	ļ		5	n.d.
Tetrabromobiphenyl			5	n.d.
Pentabromobiphenyl			5	n.d.
Hexabromobiphenyl	Ī		5	n.d.
Heptabromobiphenyl			5	n.d.
Octabromobiphenyl			5	n.d.
Nonabromobiphenyl			5	n.d.
Decabromobiphenyl		With reference to IEC	5	n.d.
Sum of PBDEs (Mono to Nona)	ma/ka	62321/2nd CDV (111/95/CDV).	-	n.d.
(Note 4)	mg/kg	Determination of PBB and		
Monobromobiphenyl ether		PBDE by GC/MS.	5	n.d.
Dibromobiphenyl ether	Ī		5	n.d.
Tribromobiphenyl ether	ĺ		5	n.d.
Tetrabromobiphenyl ether			5	n.d.
Pentabromobiphenyl ether			5	n.d.
Hexabromobiphenyl ether	İ		5	n.d.
Heptabromobiphenyl ether	1		5	n.d.
Octabromobiphenyl ether	Ī		5	n.d.
Nonabromobiphenyl ether	Ī		5	n.d.
Decabromobiphenyl ether			5	n.d.
Sum of PBDEs (Mono to Deca)			-	n.d.



No. : CE/2008/31207 Date : 2008/03/10 Page: 4 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Test Item (s):	Unit	Method	MDL	Result
rest item (s).	Oilit	WetHou	IVIDL	No.1
Halogen		With reference to BS EN 14582:2007. Analysis was performed by IC method for F, CI, Br, I content.	-	
Halogen-Fluorine (F) (CAS No.: 007782-41-4)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Fluorine content.	50	1520
Halogen-Chlorine (CI) (CAS No.: 007782-50-5)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Chlorine content.	50	n.d.
Halogen-Bromine (Br) (CAS No.: 007726-95-6)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Bromine content.	50	56900
Halogen-lodine (I) (CAS No.: 007553-56-2)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for lodine content.	50	n.d.

Note: 1. mg/kg = ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. According to 2005/717/EC DecaBDE is exempt.

5. "---" = Not Conducted

6. " - " = Not Regulated

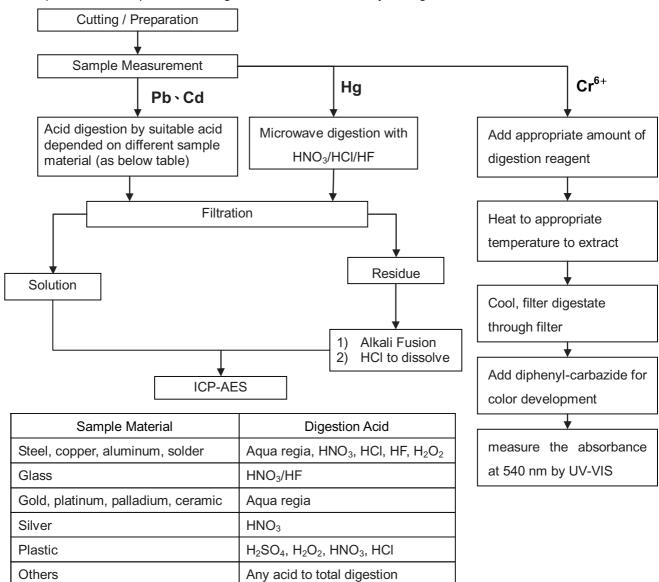
7. Antimony trioxide(Sb<sub>2</sub>O<sub>3</sub>): Calculate from antimony content multiply 1.197 factor.



No. : CE/2008/31207 Date : 2008/03/10 Page: 5 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Troy Chang
- 3) Name of the person in charge of measurement: Chenyu Kung

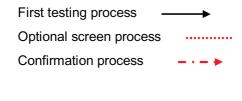


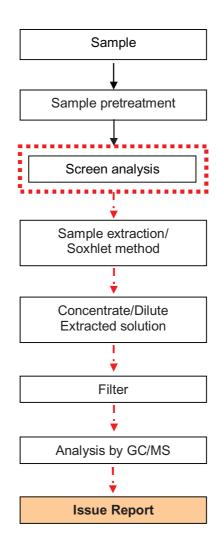


No.: CE/2008/31207 Date: 2008/03/10 Page: 6 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

### PBB/PBDE analytical FLOW CHART



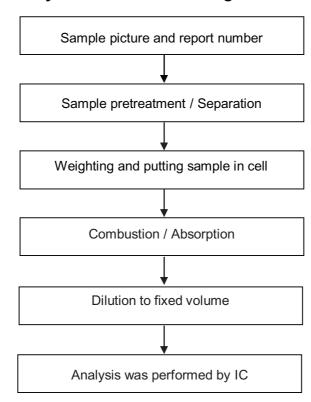




No. : CE/2008/31207 Date : 2008/03/10 Page: 7 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

### Analytical flow chart of halogen content

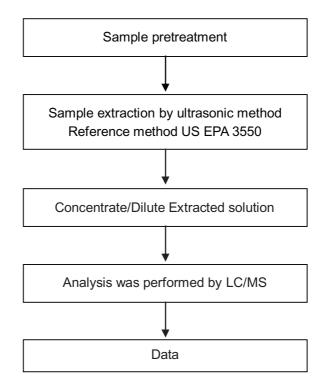




No. : CE/2008/31207 Date : 2008/03/10 Page: 8 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

### Analytical flow chart of PFOA/PFOS content



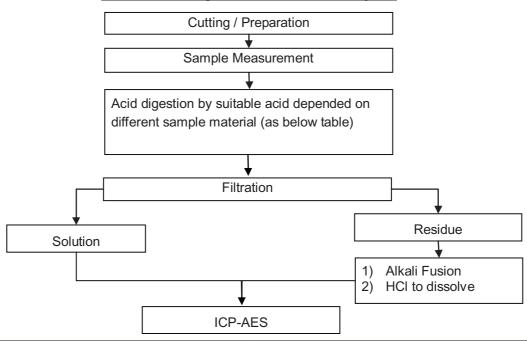


No.: CE/2008/31207 Date: 2008/03/10 Page: 9 of 10

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
- 2) Name of the person who made measurement: Troy Chang
- 3) Name of the person in charge of measurement: Chenyu Kung

#### Flow Chart of Digestion for elements analysis



Steel, copper, aluminum, solder	Aqua regia, HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub>
Glass	HNO <sub>3</sub> /HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO <sub>3</sub>
Plastic	H <sub>2</sub> SO <sub>4</sub> , H <sub>2</sub> O <sub>2</sub> , HNO <sub>3</sub> , HCl
Others	Any acid to total digestion



No. : CE/2008/31207 Date : 2008/03/10 Page: 10 of 10

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN



\*\* End of Report \*\*



**Test Report** No.: CE/2008/31217 Date: 2008/03/10 Page: 1 of 5

I-PEX JP CO., LTD.

6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

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

Sample Description : MHF PLUG CONTACT

Style/Item No. : 1845-0\*\*
Sample Receiving Date : 2008/03/05

Testing Period : 2008/03/05 TO 2008/03/10

\_\_\_\_\_\_\_

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





I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

### Test Result(s)

PART NAME NO.1 : GOLDEN COLORED METAL (INCLUDING THE PLATING

LAYER)

Tost Itom (s):	Unit	Method	MDL	Result
Test Item (s):	Ullit	Wethou	MIDL	No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	20
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium by UV/Vis Spectrometry.	2	n.d.
Gold (Au)	mg/kg	With reference to US EPA Method 3050B for Gold Content. Analysis was performed by ICP- AES.	2	6390
Nickel (Ni)	mg/kg	With reference to US EPA Method 3050B for Nickel Content. Analysis was performed by ICP-AES.	2	47400

Note: 1. mg/kg = ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

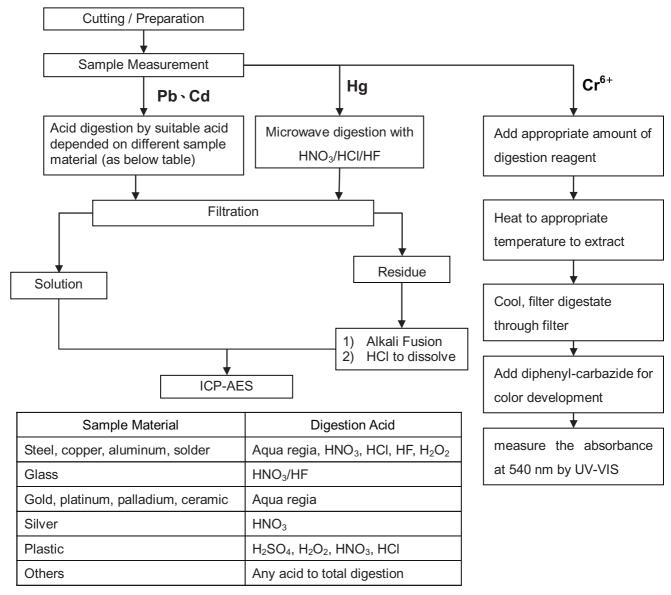
4. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.



No. : CE/2008/31217 Date : 2008/03/10 Page: 3 of 5

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

- 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: Troy Chang
- 3) Name of the person in charge of measurement: Chenyu Kung

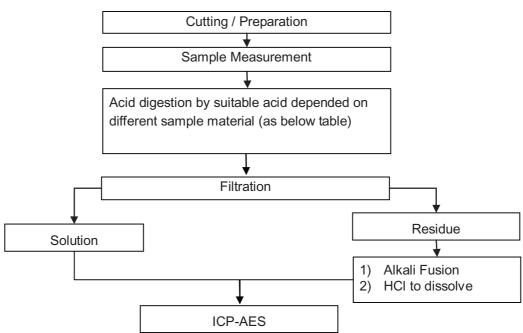




I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
- 2) Name of the person who made measurement: Troy Chang
- 3) Name of the person in charge of measurement: Chenyu Kung

### Flow Chart of Digestion for elements analysis



Steel, copper, aluminum, solder	Aqua regia, HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub>
Glass	HNO <sub>3</sub> /HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO <sub>3</sub>
Plastic	H <sub>2</sub> SO <sub>4</sub> , H <sub>2</sub> O <sub>2</sub> , HNO <sub>3</sub> , HCl
Others	Any acid to total digestion



No. : CE/2008/31217 Date : 2008/03/10 Page : 5 of 5

I-PEX JP CO., LTD. 6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN



\*\* End of Report \*\*