

Test Report No. CANML1602215401 Date: 22 Feb 2016 Page 1 of 8

SHANGHAI YIHE NEW MATERIAL TECHNOLOGY LMTD R102,NO.114,NONG3339,SHANGNAN RD.,PUDONG NEW DISTRICT,SHANGHAI,CHINA

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

SGS Job No. : GZIN1602005500PC - GZ

Internal Reference No.: GZIN1602005482ML

Buyer: SHANGHAI YIHE NEW MATERIAL TECHNOLOGY LMTD

Manufacturer: SHANGHAI YIHE NEW MATERIAL TECHNOLOGY LMTD

Date of Sample Received: 17 Feb 2016

Testing Period: 17 Feb 2016 - 22 Feb 2016

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 of Lead,

Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs),

Polybrominated diphenyl ethers (PBDEs) and Phthalates such as

Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl

phthalate (DBP), and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of

SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Merry Lv

Approved Signatory



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Test Results:

Test Part Description:

Specimen No. SGS Sample ID Description
SN1 CAN16-022154.001 White powder

Remarks:

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

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

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 62321-6:2015, determination of PBBs and PBDEs by GC-MS.

(6) With reference to EN 14372:2004, determination of phthalates by GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	2	ND
Sum of PBBs	1,000	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	1,000	mg/kg	-	ND

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Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	
Monobromodiphenyl ether	-	mg/kg	5	ND	
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	
Dibutyl phthalate (DBP)	1,000	mg/kg	30	ND	
Butyl benzyl phthalate (BBP)	1,000	mg/kg	30	ND	
Bis (2-ethylhexyl) phthalate (DEHP)	1,000	mg/kg	30	ND	
Diisobutyl Phthalates (DIBP)	1,000	mg/kg	30	ND	

Notes:

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.

<u>Halogen</u>

Test Method: With reference to EN 14582: 2007, analysis was performed by Ion Chromatograph (IC).

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Fluorine (F)	mg/kg	50	ND
Chlorine (CI)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
lodine (I)	mg/kg	50	ND

Phthalate

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

Test Item(s)	CAS NO.	<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
Diisobutyl Phthalate (DIBP)	84-69-5	%(w/w)	0.003	ND



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Test Item(s)	<u>CAS N</u>	O. Unit	<u>MDL</u>	<u>001</u>
Diisononyl Phthalate (DINP)	28553-12 68515-48	, ,	0.010	ND
Di-n-octyl Phthalate (DNOP)	117-84-	0 %(w/w)	0.003	ND
Diisodecyl Phthalate (DIDP)	26761-40 68515-49		0.010	ND
Dimethyl Phthalate (DMP)	131-11-	3 %(w/w)	0.003	ND
Diethyl Phthalate (DEP)	84-66-2	2 %(w/w)	0.003	ND
Dinonyl Phthalate (DNP)	84-76-4	1 %(w/w)	0.003	ND
Diisooctyl Phthalate (DIOP)	27554-26	6-3 %(w/w)	0.010	ND
Dipropyl Phthalate (DPrP)	131-16-	8 %(w/w)	0.003	ND
Dicyclohexyl Phthalate (DCHP)	84-61-7	%(w/w)	0.003	ND
Di-n-pentyl Phthalate (DnPP)	131-18-	0 %(w/w)	0.003	ND
Dibenzyl Phthalate (DBzP)	523-31-	9 %(w/w)	0.003	ND
Diphenyl Phthalate (DPhP)	84-62-8	%(w/w)	0.003	ND
Di-n-hexyl Phthalate (DnHP)	84-75-3	%(w/w)	0.003	ND

Notes:

- (1)DBP,BBP,DEHP Reference information: Entry 51 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC):
- i) Shall not be used as substances or in mixtures, in concentrations greater than 0.1 % by weight of the plasticised material, in toys and childcare articles.
- ii) Toys and childcare articles containing these phthalates in a concentration greater than 0.1 % by weight of the plasticised material shall not be placed on the market.
- Please refer to Regulation (EC) No 552/2009 to get more detail information
- (2)DINP, DNOP, DIDP Reference information: Entry 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC).
- i) Shall not be used as substances or in mixtures, in concentrations greater than 0.1 % by weight of the plasticised material, in toys and childcare articles which can be placed in the mouth by children.
- ii) Such toys and childcare articles containing these phthalates in a concentration greater than 0.1 % by weight of the plasticised material shall not be placed on the market.
- Please refer to Regulation (EC) No 552/2009 to get more detail information



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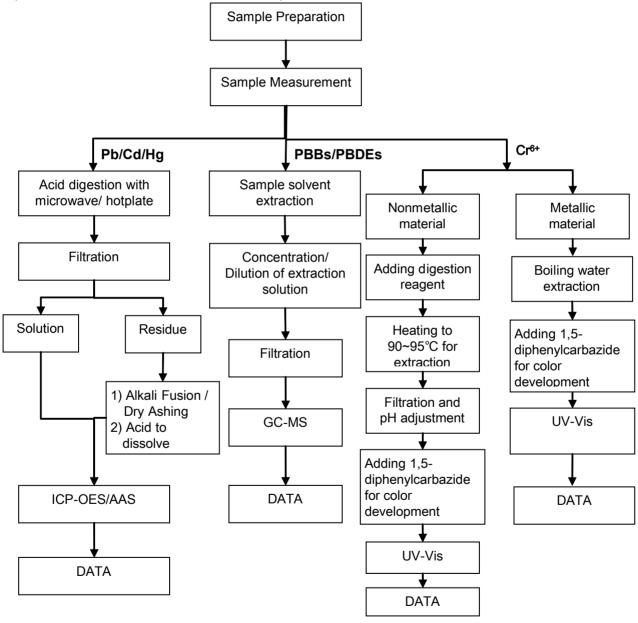
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ATTACHMENTS

Pb/Cd/Hg/Cr6+/PBBs/PBDEs Testing Flow Chart

- 1) Name of the person who made testing: Bruce Xiao / Sunny Hu
- 2) Name of the person in charge of testing: Bella Wang / Cutey Yu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr⁶⁺ and PBBs/PBDEs test method excluded).





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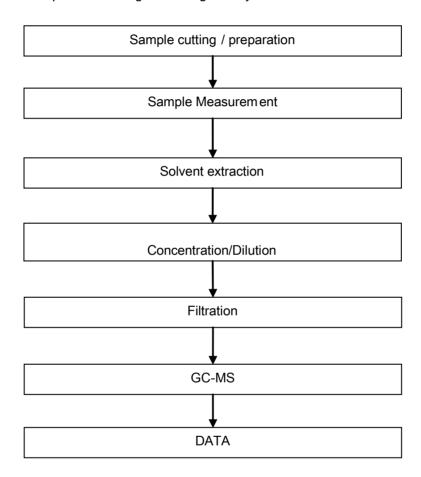
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ATTACHMENTS

Phthalates Testing Flow Chart

- 1) Name of the person who made testing: Sunny Hu
- 2) Name of the person in charge of testing: Cutey Yu



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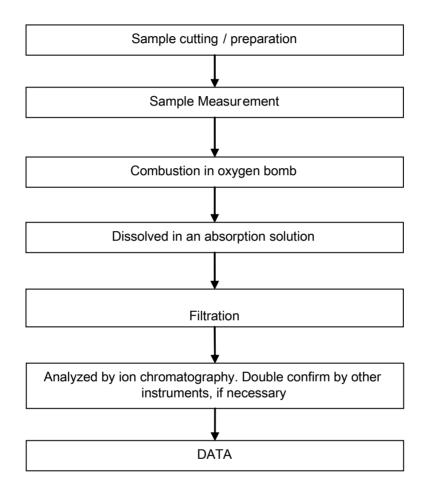
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Halogen Testing Flow Chart

1) Name of the person who made testing: Hanming Xiao

2) Name of the person in charge of testing: Bella Wang





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Sample photo:



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