

Test Report No.HKHL1302016395TC-01 Date: MAR 06, 2013 Page 1 of 12

DAH BANG PRINTING INK MANUFACTORY LIMITED

大鹏油墨厂有限公司

香港葵涌梨木道 4-30 号亿万工业大厦 12楼 B室

THIS REPORT SUPERSEDES ALL PREVIOUS DOCUMENTS BEARING THE TEST REPORT NUMBER HKHL1302016395TC.

The following samples were submitted and identified on behalf of the client as: SEE ATTACHMENT

Style / Item No. : SEE ATTACHMENT

Supplier : 1)东莞市友和印刷物料有限公司 中国广东省东莞市横沥镇中山东路地铺

2) 昆山松田印刷物料有限公司 中国江苏省昆山市玉山镇燕桥滨村

Sample Receiving Date : FEB 27, 2013

Test Performing Date : FEB 27, 2013 - MAR 05, 2013

Test I	Requested	Conclusion
1.	CPSIA section 101(f) (1), US 16 CFR 1303 – Lead in paint/similar surface coating material	PASS
2.	Determination of heavy elements content in submitted sample in accordance with Mattel PI of QSOP 0006-3600 (Rev. Z, 09/25/2012) — Heavy Elements (Except Clause 2.4.1, see remark 1)	PASS

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Test	Requested	Conclusion
3.	Determination of heavy elements content in submitted sample in accordance with MATTEL PI OF RMS 0006-2901 (Rev. B, 02/08/2012) – Raw surface coating materials	SEE RESULT
4.	Hasbro Global Quality Assurance Safety & Reliability Specification, SRS-012 (Rev. W, 12/17/2012) - Heavy Metals in Surface Coatings Specification	SEE RESULT

Remark 1: Clause 2.4.1 of QSOP 0006-3600 (Rev. Z, 09/25/2012) was not conducted as per client's

request. It is recommended to conduct the test of Clause 2.4.1 accordingly as to meet the

flame retardant requirement of QSOP0006-3614.

Remark 2: SRS-018 replaces SRS-012, 044, 047, 052 and 099 specifications in their entirety & replaces

the sections related to heavy metal requirements in SRS-040, 060 and 062 specifications.

******* FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *******

Signed for and on behalf of SGS Hong Kong Ltd.

Cheung Cheuk Fung, Henry Senior Chemist



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ATTACHMENT:

	SAMPLE	
1	NO.51 GLOSS RED	NO.51 大红
2	NO.50 GLOSS DARK RED	NO.50 深红
3	NO.80 GLOSS BRONZE BLUE	NO.80 金蓝

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Results:

1. CPSIA and US 16 CFR 1303 - Lead in Paint/Similar Surface Coating Materials

Method: With reference to CPSC-CH-E1003-09.1 - Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings

Test Item(s)	Lead (Pb)
Permissible Limit (ppm)	90
Specimen Description	Result(s) (ppm)
1. Red wet ink (#51) + Blue wet ink (#80) + Dk. red wet ink (#50)	ND

Note:

- ppm = parts per million
- ND = Not Detected (lower than MDL)
- MDL = Method Detection Limit = 10 ppm
- 1% = 10000 mg/kg = 10000 ppm
- Composite test has been performed as per client's request and the result(s) is (are) calculated using the minimum specimen weight

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2. MATTEL PI OF QSOP 0006-3600 (Rev. Z, 09/25/2012)- Heavy Elements

Method: As specified in MATTEL PI OF QSOP 0006-3600 (Rev. Z, 09/25/2012). Analysis was performed by Atomic Absorption Spectrometry (AAS) or Inductively Coupled Plasma Optical Emission

Spectrometry (ICP-OES) or Inductively Coupled Plasma Mass Spectrometry(ICP-MS)

<u>Clause 2.3-All Products Not Intended Exclusively for Adults (including Collectible Fashion Dolls Intended for Brazil)</u>

Clause 2.3.1-Surface Coatings

All accessible surface coatings & all surface coatings on packaging intended to be retained

Composite Group Result

Test Item(s)		Total Result(s) (ppm)	MDL (ppm)	Limits (ppm)	
		1	52 (pp)		
Total Cadmium	(Cd)	ND	5	75	
Total Lead	(Pb)	ND	10	40	
Total Mercury	(Hg)	ND	5	10	
Total Nickel	(Ni)	ND	100	10000	
Total Tin	(Sn)	ND	12		

Specimen Description:

1. Red wet ink (#51) + Blue wet ink (#80) + Dk. red wet ink (#50)

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Took Home(a)		Soluble Method 1 Result(s) (ppm)					
Test Item(s)		1	2	3	MDL (ppm)	Limits (ppm)	
Soluble Aluminium	(AI)	ND	ND	ND	50	70000	
Soluble Antimony	(Sb)	ND	ND	ND	5	60	
Soluble Arsenic	(As)	ND	ND	ND	2.5	25	
Soluble Barium	(Ba)	ND	ND	ND	10	500	
Soluble Boron	(B)	ND	ND	ND	50	15000	
Soluble Cadmium	(Cd)	ND	ND	ND	5	17	
Soluble Chromium	(Cr)	ND	ND	ND	5	60	
Soluble Chromium (VI)	(Cr(VI))	_	_	_		0.2	
Soluble Cobalt	(Co)	ND	ND	ND	10	130	
Soluble Copper	(Cu)	ND	ND	ND	50	7700	
Soluble Manganese	(Mn)	ND	ND	ND	50	15000	
Soluble Nickel	(Ni)	ND	ND	ND	10	930	
Soluble Selenium	(Se)	ND	ND	ND	10	300	
Soluble Strontium	(Sr)	ND	ND	ND	50	56000	
Soluble Tin	(Sn)	ND	ND	ND	2.5	180000	
Soluble Organic Tin					0.5	12	
Soluble Zinc	(Zn)	ND	ND	ND	50	46000	

Specimen Description:

- 1. Red wet ink (#51)
- 2. Blue wet ink (#80)
- 3. Dk. red wet ink (#50)

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Test Item(s)		Soluble Method 2 Result(s) (ppm)			MDI (nnm)	Limite (mmm)	
		1	2	3	MDL (ppm)	Limits (ppm)	
Soluble Antimony	(Sb)	ND	ND	ND	10	1000	
Soluble Arsenic	(As)	ND	ND	ND	10	1000	
Soluble Barium	(Ba)	ND	ND	ND	20	1000	
Soluble Cadmium	(Cd)	ND	ND	ND	5	1000	
Soluble Selenium	(Se)	ND	ND	ND	20	1000	

Specimen Description:

- 1. Red wet ink (#51)
- 2. Blue wet ink (#80)
- 3. Dk. red wet ink (#50)

Clause 2.4 - Additional Requirements for All Electrical and Electronic Products

Clause 2.4.2 - All Parts of Products

All Parts of Products

Composite Group Result

Test Item(s)		Total Result(s) (ppm)	MDL	Limit
		1	(ppm)	(ppm)
Total Cadmium	(Cd)	ND	5	75
Total Chromium	(Cr)	ND	5	See Remark
Total Lead	(Pb)	ND	10	1000
Total Mercury	(Hg)	ND	5	1000

Specimen Description

1. Red wet ink (#51) + Blue wet ink (#80) + Dk. red wet ink (#50)

Remark: Hexavalent Chromium test was not conducted due to the total chromium results do not exceed Hexavalent Chromium limit 1000ppm

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Note: - ppm = parts per million

- MDL = Method Detection Limit
- ND = Not Detected (lower than MDL)
- = The test method for Cr(VI) has not yet determined according to MATTEL PI OF QSOP 0006-3600 (Rev. Z, 09/25/2012) clause 3.3.10
- Composite test has been performed as per client's request and the result(s) is (are) calculated using the minimum specimen weight.
- Soluble Pb, Cd, Cr, Hg, As, Ba, Se, Sb in method 1 results shown are of the adjusted analytical results

3. MATTEL PI OF RMS 0006-2901 (Rev. B, 02/08/2012) - Raw surface coating materials

Method: As specified in MATTEL PI OF RMS 0006-2901 (Rev. B, 02/08/2012), analysis was performed by Atomic Absorption Spectrometry or Inductively Coupled Plasma Optical Emission Spectrometry or

Inductively Coupled Plasma Mass Spectrometry

Composite Group Result

Test Item(s)		Total Result(s) (ppm)	MDL	Limits
		1	(ppm)	(ppm)
Total Cadmium	(Cd)	ND	5	75
Total Lead	(Pb)	ND	10	20
Total Mercury	(Hg)	ND	5	10
Total Nickel	(Ni)	ND	100	10000
Total Tin	(Sn)	ND	12	

Specimen Description:

1. Red wet ink (#51) + Blue wet ink (#80) + Dk. red wet ink (#50)

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To ad Marro(a)		Soluble M	ethod 1 Resu	lt(s) (ppm)			
Test Item(s)		1	2	3	MDL (ppm)	Limits (ppm)	
Soluble Aluminium	(AI)	ND	ND	ND	50	70000	
Soluble Antimony	(Sb)	ND	ND	ND	5	25	
Soluble Arsenic	(As)	ND	ND	ND	2.5	15	
Soluble Barium	(Ba)	ND	ND	ND	10	350	
Soluble Boron	(B)	ND	ND	ND	50	15000	
Soluble Cadmium	(Cd)	ND	ND	ND	5	17	
Soluble Chromium	(Cr)	ND	ND	ND	5	40	
Soluble Chromium (VI)	(Cr(VI))	_	_	_		0.2	
Soluble Cobalt	(Co)	ND	ND	ND	10	130	
Soluble Copper	(Cu)	ND	ND	ND	50	7700	
Soluble Lead	(Pb)	ND	ND	ND	5	30	
Soluble Manganese	(Mn)	ND	ND	ND	50	15000	
Soluble Mercury	(Hg)	ND	ND	ND	5	10	
Soluble Nickel	(Ni)	ND	ND	ND	10	930	
Soluble Selenium	(Se)	ND	ND	ND	10	200	
Soluble Strontium	(Sr)	ND	ND	ND	50	56000	
Soluble Tin	(Sn)	ND	ND	ND	2.5	180000	
Soluble Organic Tin					0.5	12	
Soluble Zinc	(Zn)	ND	ND	ND	50	46000	

Specimen Description:

- 1. Red wet ink (#51)
- 2. Blue wet ink (#80)
- 3. Dk. red wet ink (#50)

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Test Item(s)		Soluble Method 2 Result(s) (ppm)			MDI (nnm)	Limite (mmm)	
		1	2	3	MDL (ppm)	Limits (ppm)	
Soluble Antimony	(Sb)	ND	ND	ND	10	400	
Soluble Arsenic	(As)	ND	ND	ND	10	400	
Soluble Barium	(Ba)	ND	ND	ND	20	800	
Soluble Cadmium	(Cd)	ND	ND	ND	5	400	
Soluble Selenium	(Se)	ND	ND	ND	20	400	

Specimen Description:

- 1. Red wet ink (#51)
- 2. Blue wet ink (#80)
- 3. Dk. red wet ink (#50)

Note: - ppm = parts per million

- MDL = Method Detection Limit
- ND = Not Detected (lower than MDL)
- - = The test methods for Cr(VI) has not yet determined according to MATTEL PI OF RMS 0006-2901 (Rev.B, 08/02/2012) clause 3.
- Soluble Pb, Cd, Cr, Hg, As, Ba, Se, Sb in method 1 results shown are of the adjusted analytical results
- Composite test has been performed as per client's request and the result(s) is (are) calculated using the minimum specimen weight.

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4. SRS-012 (Rev. W, 12/17/2012) - Heavy Metal Content

Method: As specified in SRS-012 (Rev. W, 12/17/2012)

Analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)

Test Item(s)	Pb	Cd	Cr	Hg
MDL (ppm)	10	5	5	5
Action Total Limit (ppm)		30	500	
Required Total Limit (ppm)	20	40	750	5
Specimen Description	Total Result(s) (ppm)			
1. Red wet ink (#51) + Blue wet ink (#80) + Dk. red wet ink (#50)	ND	ND	ND	ND

Test Item(s)	Pb	Sb	As	Ва	Cd	Cr	Hg	Se		
MDL(ppm)	5	5	2.5	10	5	5	5	10		
Action Soluble Limit (ppm)		25	10		30	40	-	200		
Required Soluble Limit (ppm)	20	60	25	350	40	60	5	500		
Specimen Description	Adjusted Soluble Result(s) (ppm)									
1. Red wet ink (#51)	ND	ND	ND	ND	ND	ND	ND	ND		
2. Blue wet ink (#80)	ND	ND	ND	ND	ND	ND	ND	ND		
3. Dk. red wet ink (#50)	ND	ND	ND	ND	ND	ND	ND	ND		

Element	Sb	As	Ва	Cd	Se		
MDL (ppm)	10	10	20	5	20		
Canada Action Soluble Limit (ppm)	750	30	750		750		
Canada Required Soluble Limit (ppm)	1000	100	1000	1000	1000		
Specimen Description	Soluble Result(s) (ppm)						
1. Red wet ink (#51)	ND	ND	ND	ND	ND		
1. Red wet ink (#51) 2. Blue wet ink (#80)	ND ND	ND ND	ND ND	ND ND	ND ND		

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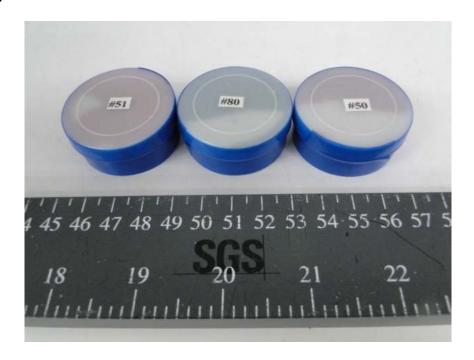


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Note: - ppm = parts per million

- MDL = Method Detection Limit
- ND = Not Detected (lower than MDL)
- All permissible limits are quoted from SRS-018 (Rev. Initial, 12/17/2012) appendix 1.
- Composite test has been performed as per client's request and the result(s) is (are) calculated using the minimum specimen weight

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*** End of Report ***

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