

No.: EM180514018C Date: May 18, 2018 Page 1 of 18

Applicant : DONGGUAN TOKZIN INDUSTRIAL CO.,LTD

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PROVINCE, CHINA

地 址 : 东莞市茶山镇塘环岭工业区

Sample Name : Recycled polyester staple fiber

样品名称 : 再生涤纶短纤维

Received Date : May 14, 2018

接收日期 : 2018年05月14日

Test Period : May 14, 2018 ~ May 18, 2018

检测日期 : 2018年05月14日~2018年05月18日

Test Requested 检测要求

: 1. As requested by client, according to EN 71-3:2013+A2:2017, to determine the content of the migration of certain elements in the submitted sample.

根据客户要求,依据 EN 71-3:2013+A2:2017,检测所提交样品中元素迁移含量。

- 2. As requested by client, according to the standard ASTM F963-17 Section 4.3.5, to determine the Heavy Metal contents in the submitted sample.
 - 根据客户要求,依据 ASTM F963-17-4.3.5, 检测所提交样品中重金属元素的含量。
- As requested by client, to determine Polycyclic Aromatic Hydrocarbon (PAHs) for compliance with Germany GS Certification and AfPS GS 2014:01 PAK issued by Ausschuss für Produktsicherheit.

根据客户要求,为符合德国 GS 认证和德国消费品安全委员会颁布的 AfPS GS 2014:01 PAK 的要求,检测所提交样品中的多环芳香烃(PAHs)的含量。

- As requested by client, According to EN71-9:2005+A1:2007, to determine the Formaldehyde content in the submitted sample.
 - 根据客户要求,依据 EN71-9:2005+A1:2007,检测所提交样品中甲醛含量。
- 5. As requested by client, according to RoHS Directive(EU) 2015/863 amending Annex II to Directive 2011/65/EU, to determine:

根据客户要求, 依据欧盟 RoHS 指令 2011/65/EU 附录 II 的修订指令(EU) 2015/863, 检测以下项目:

- 1) the content of Lead, Cadmium and Mercury in the submitted sample; 样品中的铅,镉和汞的含量;
- 2) the content of Hexavalent Chromium in the submitted sample; 样品中的六价铬的含量;
- 3) the content of Polybrominated Biphenyls(PBBs) and Polybrominated Diphenyl-Ethers(PBDEs) in the submitted sample;

样品中的多溴联苯(PBBs)以及多溴二苯醚(PBDEs)的含量;

4) the content of Bis(2-ethylhexyl)phthalate(DEHP), Dibutyl phthalate(DBP), Benzylbutyl phthalate(BBP), and Diisobutyl phthalate(DIBP) in the submitted sample.

样品中的邻苯二甲酸二(2-乙基己)酯(DEHP)、邻苯二甲酸二丁酯(DBP)、邻苯二甲酸丁苄酯(BBP)和邻苯二甲酸二异丁酯(DIBP)的含量。





No.: EM180514018C Date: May 18, 2018 Page 2 of 18

- 6. As requested by client, according to the standard ASTM F963-17 Section 4.3.7 Stuffing Materials, to perform the related testing.
 - 根据客户要求,依据 ASTM F963-17-4.3.7 填充材料,对所提交样品进行评估。
- 7. As specified by client, to determine the BPA content in the submitted sample. 根据客户要求,测定委托样品中双酚 A 的含量。
- 8. As specified by client, to determine the Tri(2,3-dichloropropyl)phosphate(TDCPP), Tris(2-chloroethyl) phosphate(TCEP), Tris(2,3-dibromopropyl) phosphate(TDBPP), Hexabromocyclododecane(HBCDD), Tris(2-chloro-1-methylethyl) phosphate (TCPP), Tris[2-chloro-1-(chloromethyl)ethyl] phosphate(TDCP), Tetrabromobisphenol A (TBBPA) contents in the submitted sample. 根据客户要求,测定样品中的磷酸三(1,3-二氯-2-丙基)酯(TDCPP),磷酸三(二氯乙基)酯 (TCEP),磷酸三 (2,3二溴丙基) 酯(TDBPP),六溴环十二烷(HBCDD),磷酸三(1-氯-2-丙基)。
- 基)酯(TCPP),磷酸三(1,3-二氯-2-丙基)酯(TDCP),四溴双酚 A(TBBPA)的含量。 9. As specified by client, to determine the contents of Phthalates in the submitted sample. 根据客户要求,检测委托样品中邻苯二甲酸酯的含量。

Test Results 检测结果 Please refer to next page (s).

请参看随后页面。





No.: EM180514018C Date: May 18, 2018 Page 3 of 18

Executive Summary:

执行测试总结:

STANDARD 标 准	CONCLUSION 结 论
1. EN 71-3:2013+A2:2017 – Migration of certain elements	PASS
EN 71-3:2013+A2:2017 – 元素迁移含量要求	合格
2. ASTM F963-17 Section 4.3.5 - Heavy Metal contents	PASS
ASTM F963-17-4.3.5 – 重金属元素	合格
3. Germany GS Certification and AfPS GS 2014:01 PAK - PAHs content—Category 2	
(Toys according to Toy Directive 2009/48/EC)	PASS
德国 GS 认证和 AfPS GS 2014:01 PAK - 多环芳香烃(PAHs)的含量一第二类(玩具指令	合格
2009/48/EC 规定的玩具)	
4. EN71-9:2005+A1:2007 - Formaldehyde content	PASS
EN71-9:2005+A1:2007 - 甲醛含量	合 格
5. RoHS Directive(EU) 2015/863 amending Annex II to Directive 2011/65/EU	PASS
欧盟 RoHS 指令 2011/65/EU 附录 Ⅱ 的修订指令(EU) 2015/863	合 格
6. ASTM F963-17 Section 4.3.7 - Stuffing Materials	PASS
ASTM F963-17-4.3.7 – 填充材料	合 格
7. BPA content	SEE DATA
双酚 A 的含量	见数据
8. Tri(2,3-dichloropropyl)phosphate(TDCPP), Tris(2-chloroethyl) phosphate(TCEP), Tris(2,3-dibromopropyl) phosphate(TDBPP), Hexabromocyclododecane(HBCDD), Tris(2-chloro-1-methylethyl) phosphate (TCPP), Tris[2-chloro-1-(chloromethyl)ethyl] phosphate(TDCP), Tetrabromobisphenol A (TBBPA) contents(Client's requirement) 磷酸三(1,3-二氯-2-丙基)酯(TDCPP),磷酸三(二氯乙基)酯(TCEP),磷酸三(2,3 二溴丙基)酯(TDBPP),六溴环十二烷(HBCDD),磷酸三(1-氯-2-丙基)酯(TCPP),磷酸三(1,3-二氯-2-丙基)酯(TDCP),四溴双酚 A(TBBPA)的含量(客户要求)	PASS 合格
9. Phthalates contents 邻苯二甲酸酯含量	SEE DATA 见数据

Signed for and on behalf of

EMTEK (Shenzhen) Co

Tested by:

Gretore

Test engineer

Reviewed by:

Ethan

Technical supervisor

Approved by:

Authorized signatory May 18, 2018



No.: EM180514018C Date: May 18, 2018 Page 4 of 18

Test Results:

检测结果:

1. EN 71-3:2013+A2:2017 - Migration of certain elements EN 71-3:2013+A2:2017 - 元素迁移含量要求

Test Method: To refer to the EN 71-3:2013+A2:2017, Soluble elements were analyzed by ICP-MS. Chromium(III),

Chromium(VI) were analyzed by LC-ICP-MS. Organic Tin were analyzed by GC-MS.

检测方法 : 依据EN 71-3:2013+A2:2017,可溶性元素分析仪器为ICP-MS。三价铬(Cr3+),六价铬(Cr6+)分析仪器

为LC-ICP-MS。有机锡分析仪器为GC-MS。

Test Item 检测项目		
Aluminum (AI) 铝 (AI)	ND	10
Antimony (Sb) 锑 (Sb)	ND	10
Arsenic (As) 砷 (As)	ND	10
Barium (Ba) 钡 (Ba)	ND	10
Boron (B) 硼 (B)	ND	10
Cadmium (Cd) 镉 (Cd)	ND	10
Chromium (Cr³+)# 铬 (Cr³+) #	ND	10
Chromium (Cr ⁶⁺)# 铬 (Cr ⁶⁺) #	ND	0.2
Cobalt (Co) 钴 (Co)	ND	10
Copper (Cu) 铜 (Cu)	ND	10
Lead (Pb) 铅 (Pb)	ND	1.0
Manganese (Mn) 锰 (Mn)	ND	10
Mercury (Hg) 汞 (Hg)	ND	10
Nickel (Ni) 镍 (Ni)	ND	10
Selenium (Se) 硒 (Se)	ND	10
Strontium (Sr) 锶(Sr)	ND	10





No.: EM180514018C Date: May 18, 2018 Page 5 of 18

Test Item 检测项目	Result(mg/kg) 结果(mg/kg) White fiber 白色纤维	MDL 检出限 (mg/kg)	
Tin (Sn) 锡 (Sn)	ND	10	
Organic Tin* 有机锡*	ND	3	
Zinc (Zn) 锌 (Zn)	ND	10	

Remark: 1. mg/kg = milligram per kilogram = ppm 说明: mg/kg = 毫克/千克 = 百万分之一

ND = Not Detected (less than MDL)

MDI Method Detection Limit

ND = 未检测到(小于 MDL)

MDL = Method Detection Limit

MDL = 方法检测限

2. #Soluble Chromium (III) and Soluble Chromium (VI) were reported as Soluble Total Chromium, further confirmation test will be required when Total Chromium is detected.

#=溶出的三价铬和六价铬是以溶出的总铬计,当检测到总铬时,必须进行进一步的验证试验。

- 3. *Soluble Organic Tin was reported as Soluble Tin, further confirmation test will be required when Soluble Tin is detected.
 - *=溶出的有机锡是以溶出的锡计,当检测到锡时,必须进行进一步的验证试验。
- 4. The materials tested belong to Scraped-off toy material by identifying. 样品参照在玩具表面刮出物中的限量要求。





No.: EM180514018C Date: May 18, 2018 Page 6 of 18

Requirement of migration of certain elements content according to EN 71-3:2013+A2:2017: 依据 EN 71-3:2013+A2:2017 迁移金属元素含量要求

Parameter 参数			Scraped-off toy material 在玩具表面刮出物中 (mg/kg)
Aluminum 铝 (AI)	5625	中(mg/kg) 1406	70000
Antimony 锑 (Sb)	45	11.3	560
Arsenic 砷 (As)	3.8	0.9	47
Barium 钡 (Ba)	1500	375	18750
Boron 硼 (B)	1200	300	15000
Cadmium 镉 (Cd)	1.3	0.3	17
Chromium (III) 铬 (III)	37.5	9.4	460
Chromium Cr(VI) 铬 (VI)	0.02	0.005	0.2
Cobalt 钴 (Co)	10.5	2.6	130
Copper 铜 (Cu)	622.5	156	7700
Lead 铅 (Pb)	2	0.5	23
Manganese 锰 (Mn)	1200	300	15000
Mercury 汞 (Hg)	7.5	1.9	94
Nickel 镍 (Ni)	75	18.8	930
Selenium 硒 (Se)	37.5	9.4	460
Strontium 锶 (Sr)	4500	1125	56000
Tin 锡 (Sn)	15000	3750	180000
Organic tin 有机锡	0.9	0.2	12
Zinc 锌 (Zn)	3750	938	46000





No.: EM180514018C Date: May 18, 2018 Page 7 of 18

Test Results: 检测结果:

2. ASTM F963-17 Section 4.3.5 - Heavy Metal contents ASTM F963-17 -4.3.5 - 重金属元素

Test Method: To refer to ASTM F963-17 (CLAUSE 8.3), and the analysis was performed by ICP-OES. 检测方法: 参照 ASTM F963-17 (条款 8.3), 分析仪器为电感耦合等离子体发射光谱仪(ICP-OES)。

Analyte	Soluble 可溶性							
被分析物	Antimony 锑(Sb)	Arsenic 砷(As)	Barium 钡(Ba)	Cadmium 镉(Cd)	Chromium 铬(Cr)	Lead 铅(Pb)	Mercury 汞(Hg)	Selenium 硒(Se)
Requirement (mg/kg) 要求(mg/kg)	60	25	1000	75	60	90	60	500
MDL (mg/kg) 检出限(mg/kg)	5	2.5	5	5	5	5	5	5
Test Item 试样	Adjusted Soluble Result (mg/kg) 校正后结果(mg/kg)							
White fiber 白色纤维	ND	ND	ND	ND	ND	ND	ND	ND

Note: mg/kg = milligram per kilogram = ppm 备注:

mg/kg = 毫克/千克 = 百万分之一

MDL = Method Detection Limit

MDL = 方法检测限

ND = Not Detected (less than MDL) ND = 未检测到(小于 MDL)





No.: EM180514018C Date: May 18, 2018 Page 8 of 18

Test Results: 检测结果:

3. PAHs content requirement as specified in Germany GS Certification and AfPS GS 2014:01 PAK 多环芳香烃(PAHs)的含量 - 德国 GS 认证和 AfPS GS 2014:01 PAK

Test Method: To refer to AfPS GS 2014:01 PAK, the analysis was performed by GC-MS.

检测方法: 参照 AfPS GS 2014:01 PAK, 所得试液由 GC-MS 分析检测。

Analyte 被分析物	CAS Number CAS 号码	Result (mg/kg) 结果 (mg/kg) White fiber 白色纤维	MDL (mg/kg)
Naphthalene(NAP) # 萘 (NAP) #	91-20-3	ND	0.2
Acenaphthylene(ANY) 苊烯 (ANY)	208-96-8	ND	0.2
Acenaphthene(ANA) 苊 (ANA)	83-32-9	ND	0.2
Fluorene(FLU) 芴 (FLU)	86-73-7	ND	0.2
Phenanthrene(PHE) 菲 (PHE)	85-01-8	ND	0.2
Anthracene(ANT) 蒽 (ANT)	120-12-7	ND	0.2
Fluoranthene(FLT) 荧蒽 (FLT)	206-44-0	ND	0.2
Pyrene(PYR) 芘 (PYR)	129-00-0	ND	0.2
Benzo[a]anthracene(BaA) 苯并(a)蒽 (BaA)	56-55-3	ND	0.2
Chrysene(CHR) 屈(CHR)	218-01-9	ND	0.2
Benzo[b]fluoranthene(BbF) 苯并(b)荧蒽 (BbF)	205-99-2	ND	0.2
Benzo[[k]fluoranthene(BkF) 苯并(k)荧蒽 (BkF)	207-08-9	ND	0.2
Benzo[a]pyrene(BaP) 苯并(a)芘 (BaP)	50-32-8	ND	0.2
Indenol[1,2,3-cd]pyrene(IPY) 茚苯(1,2,3-cd)芘 (IPY)	193-39-5	ND	0.2
Dibenz[a,h]anthracene(DBA) 二苯并(a,h)蒽 (DBA)	53-70-3	ND	0.2
Benzo[g,h,i]perylene(BPE) 苯并(g,h,i)二萘嵌苯(BPE)	191-24-2	ND	0.2
Benzo[e]pyren(BeP) 苯并[e]芘(BeP)	192-97-2	ND	0.2





No.: EM180514018C Date: May 18, 2018 Page 9 of 18

Analyte 被分析物	CAS Number CAS 号码	Result (mg/kg) 结果 (mg/kg) White fiber 白色纤维	MDL (mg/kg)
Benzo[j]fluoranthen(BjF) 苯并[j]荧蒽(BjF)	205-82-3	ND	0.2
Total of above PAHs (sum)* 以上多环芳香烃总量 (总和)*		ND	<u></u>

Note: 1. mg/kg = milligram per kilogram = ppm

ND = Not Detected (less than MDL)

备注: mg/kg = 毫克/千克 = 百万分之-

ND = 未检测到(低于 MDL)

MDL = Method Detection Limit

MDL = 方法检测限

- 2. "*" = Only those PAH components which present in the material over the 0.2ppm are taken into account while calculating the sum of PAHs
 - "*" = 材料中只有含量大于 0.2ppm 的那些多环芳香烃才被计入多环芳香烃总和。
- 3. "#" = Based on its relative volatility against the other 17 PAH (according to EPA), naphthalene represents a parameter difficult to evaluate in close to skin products. Experience of the testing bodies show that loss of naphthalene as well as secondary contamination can be found. The developed naphthalene result will always only show the momentary situation of the test sample at the time of measurement.
 - "#" = 基于萘与其它 17 种 PAH(根据 EPA)相比,具有相对挥发性,它在与皮肤接触类产品中是一种难以评估的物质。可以找到测试机构在测试过程中萘的损失及二次污染的经验。所产生萘的测试结果往往只反应测试样品在测定时的一个短暂的状态。
- 4. The materials tested belong to Category 2 (Toys according to Toy Directive 2009/48/EC) by identifying. 所有样品参照在第二类(玩具指令 2009/48/EC 规定的玩具)的限量要求。





No.: EM180514018C Date: May 18, 2018 Page 10 of 18

Remark: Limit of PAH content according to AfPS GS 2014:01 PAK.

备注: 限值参照 AfPS GS 2014:01 PAK。

Parameter 参数	Category 1 第一类	Category 2 第二类		Categ 第三	
	Materials, that are intended to be put into the mouth or materials in toys with intended and prolonged skin- contact (longer	Materials, not covered by category 1, with foreseeable skin-contact of > 30 s (prolonged skin-contact) or short-term repetitive contact with the human skin 第1类不包含的材料,可预见的与皮肤接触时间> 30秒(与皮肤长期接触)或短期反复接触人体皮肤的材料 Toys according to Toy Directive 2009/48/EC 玩具指令 Act 《产品安全法》中的玩具 的其它产品			or 2, with e-contact of < 30 skin contact)
	than 30 s) 要放入口中的材料,或在玩具中使用并长期与皮肤接触(时间持续30秒以上)的材料			Toys according to Toy Directive 2009/48/EC 玩具指令 2009/48/EC规 定的玩具	Other products according to Product Safety Act 《产品安全 法》中的其它 产品
NAP	<1mg/kg	<2r	mg/kg	<10m	ng/kg
ANY, ANA, FLU, PHE, ANT, FLT, PYR	Sum<1mg/kg 总和<1mg/kg	Sum<5mg/kg 总和<5mg/kg	Sum<10mg/kg 总和<10mg/kg	Sum<20mg/kg 总和<20mg/kg	Sum<50mg/kg 总和<50mg/kg
BaA, CHR, BbF, BkF, BaP IPY, DBA, BPE, BeP, BjF	For each substance: <0.2mg/kg 对于每一种物 质: <0.2mg/kg	For each substance: <0.2mg/kg 对于每一种物 质: <0.2mg/kg	For each substance: <0.5mg/kg 对于每一种物质: <0.5mg/kg	For each substance: <0.5mg/kg 对于每一种物 质: <0.5mg/kg	For each substance: <1mg/kg 对于每一种物 质: <1mg/kg
Sum 18 PAHs (ppm)* 18 种 PAH 总和(ppm)*	<1 mg/kg	<5mg/kg	<10mg/kg	<20mg/kg	<50mg/kg





No.: EM180514018C Date: May 18, 2018 Page 11 of 18

Test Results: 检测结果:

4. EN71-9:2005+A1:2007 - Formaldehyde content

EN71-9:2005+A1:2007 - 甲醛含量

Test Method: To refer to ISO 14184-1:2011, the analysis was performed by UV-Vis.

检测方法: 参照 ISO 14184-1:2011,所得溶液经由紫外-可见光谱仪(UV-Vis)分析检测。

Analyte	Result(mg/kg) 结 果(mg/kg)	MDL	Limit 限值
被分析物	White fiber 白色纤维	(mg/kg)	(mg/kg)
Formaldehyde 甲醛	21	16	30

Note: mg/kg = milligram per kilogram = ppm MDL = Method Detection Limit

备注: mg/kg = 毫克/千克 = 百万分之一 MDL = 方法检测限





No.: EM180514018C Date: May 18, 2018 Page 12 of 18

Test Results:

检测结果:

5. RoHS Directive(EU) 2015/863 amending Annex II to Directive 2011/65/EU 欧盟 RoHS 指令 2011/65/EU 附录 II 的修订指令(EU) 2015/863

Test Method:

检测方法:

- 1) to refer to IEC 62321-5: 2013, determine the Lead, Cadmium content by ICP-OES. 参照 IEC 62321-5: 2013, 用 ICP-OES 测定铅、镉的含量。
- 2) to refer to IEC 62321-4: 2013, determine the Mercury content by ICP-OES. 参照 IEC 62321-4: 2013, 用 ICP-OES 测定汞的含量。
- 3) to refer to IEC 62321-7-2:2017, determine the Hexavalent Chromium content by UV-VIS. 参照 IEC 62321-7-2:2017, 用 UV-VIS 测定六价铬的含量。
- 4) to refer to IEC 62321-6: 2015, determine the Polybrominated Biphenyls(PBBs) and Polybrominated Diphenyl- Ethers(PBDEs) by GC-MS.
 - 参照 IEC 62321-6: 2015,用 GC-MS 测定多溴联苯(PBBs)和多溴二苯醚(PBDEs)的含量。
- 5) to refer to IEC 62321-8:2017, determine the Bis(2-ethylhexyl)phthalate (DEHP), Dibutyl phthalate(DBP), Benzylbutyl phthalate(BBP) and Diisobutyl phthalate(DIBP) by GC-MS. 参照 IEC 62321-8:2017,用 GC-MS 测定邻苯二甲酸二(2-乙基己)酯(DEHP)、邻苯二甲酸二丁酯 (DBP)、邻苯二甲酸丁苄酯(BBP)和邻苯二甲酸二异丁酯(DIBP)的含量。

Analyte 被分析物	Test Result (mg/kg) 检测结果 White fiber 白色纤维	MDL (mg/kg)	Limit 限值 (mg/kg)
Lead (Pb) 铅 (Pb)	ND	2	1000
Cadmium (Cd) 镉 (Cd)	ND	2	100
Mercury (Hg) 汞 (Hg)	ND	2	1000
Hexavalent Chromium (Cr ⁶⁺) 六价铬 (Cr ⁶⁺)	ND	20	1000





No.: EM180514018C Date: May 18, 2018 Page 13 of 18

Test Result (mg/kg)		MDL (mg/kg)	Limit 限值 (mg/kg)
Polybrominated Biphenyls (Mono – Deca) (PBBs) 多溴联苯 (1 – 10) (PBBs)	ND		1000
Monobromobiphenyl 一溴联苯	ND	5	
Dibromobiphenyl 二溴联苯	ND	5	
Tribromobiphenyl 三溴联苯	ND	5	
Tetrabromobiphenyl 四溴联苯	ND	5	
Pentabromobiphenyl 五溴联苯	ND	5	ANGEL OF THE OF
Hexabromobiphenyl 六溴联苯	ND	5	
Heptabromobiphenyl 七溴联苯	ND	5	
Octabromobiphenyl 八溴联苯	ND	5	4
Nonabromobiphenyl 九溴联苯	ND	5	
Decabromobiphenyl 十溴联苯	ND	5	
sssssPolybrominated Diphenylethers (Mono – Deca) (PBDEs) 多溴二苯醚 (1 – 10) (PBDEs)	ND		1000
Monobromodiphenyl ether 一溴二苯醚	ND	5	
Dibromodiphenyl ether 二溴二苯醚	ND	5	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Tribromodiphenyl ether 三溴二苯醚	ND	5	
Tetrabromodiphenyl ether 四溴二苯醚	ND	5	
Pentabromodiphenyl ether 五溴二苯醚	ND	5	
Hexabromodiphenyl ether 六溴二苯醚	ND	5	
Heptabromodiphenyl ether 七溴二苯醚	ND	5	
Octabromodiphenyl ether 八溴二苯醚	ND	5	
Nonabromodiphenyl ether 九溴二苯醚	ND	5	
Decabromodiphenyl ether 十溴二苯醚	ND	5	
Di-2-ethylhexyl phthalate(DEHP) 邻苯二甲酸二(2-乙基己)酯(DEHP)	ND	30	1000
Dibutyl phthalate(DBP) 邻苯二甲酸二丁酯 (DBP)	ND	30	1000
Benzylbutyl phthalate(BBP) 邻苯二甲酸丁苄酯 (BBP)	ND	30	1000
Diisobutyl phthalate (DIBP) 邻苯二甲酸二异丁酯(DIBP)	ND	30	1000





No.: EM180514018C Date: May 18, 2018 Page 14 of 18

Note: 1. mg/kg = milligram per kilogram = ppm

MDL = Method Detection Limit

备注: mg/kg = 毫克/千克 = 百万分之一

MDL = 方法检测限

ND = Not Detected (Less than MDL)

ND = 未检测到 (小于 MDL)

2. Specimens, which requested to determine Cadmium, Mercury and Lead Content, have been digested thoroughly.

对于测试铅、镉、汞的样品已完全消解。

Test Result:

检测结果:

6. ASTM F963-17 Clause 4.3.7 - Stuffing Materials ASTM F963-17 条款 4.3.7 - 填充材料

AS SPECIFIED IN ASTM F963-17 STANDARD CONSUMER SAFETY SPECIFICATION ON TOYS SAFETY 依据美国消费者安全规范玩具安全标准 ASTM F963-17

Clause	Description	Result
条款	描述	结果
4.3.7	Stuffing Materials 填充材料	Pass 合格

7. BPA content 双酚 A 的含量

Test Method: To refer to US EPA 3550C: 2007, the analyses were performed by LC-MS.

检测方法: 参照 US EPA 3550C: 2007, 所得溶液经由 LC-MS 进行分析检测。

Analyte	Test Results (mg/kg) 结果(mg/kg)	MDL
被分析物	Recycled polyester staple fiber 再生涤纶短纤维	(mg/kg)
BPA 双酚 A	ND	0.1

Note: mg/kg = milligram per kilogram = ppm

ND = Not Detected (less than MDL)

备注: mg/kg = 毫克/千克 = 百万分之一 MDL = Method Detection Limit ND = 未检测到(小于 MDL)

MDL = 方法检测限





No.: EM180514018C Date: May 18, 2018 Page 15 of 18

Test Results: 检测结果:

8. Tri(2,3-dichloropropyl)phosphate(TDCPP), Tris(2-chloroethyl) phosphate(TCEP), Tris(2,3-dibromopropyl) phosphate(TDBPP), Hexabromocyclododecane(HBCDD), Tris(2-chloro-1-methylethyl) phosphate (TCPP), Tris[2-chloro-1-(chloromethyl)ethyl] phosphate(TDCP), Tetrabromobisphenol A (TBBPA) contents in the submitted sample.

磷酸三(1,3-二氯-2-丙基)酯(TDCPP),磷酸三(二氯乙基)酯(TCEP),磷酸三(2,3 二溴丙基)酯(TDBPP),六溴环十二烷(HBCDD),磷酸三(1-氯-2-丙基)酯(TCPP),磷酸三(1,3-二氯-2-丙基)酯(TDCP),四溴双酚 A(TBBPA)的含量

Test Method: With reference to US EPA 3550C:2007, the analysis was performed by GC-MS. 检测方法: 参照 US EPA 3550C:2007, 所得试液由 GC-MS 分析检测。

Analyte 被分析物	CAS No.	Test Results (mg/kg) 结果(mg/kg) White fiber 白色纤维	MDL (mg/kg)	Client's Limit 客户限值 (mg/kg)
Tri(2,3-dichloropropyl)phosphate(TDCPP) 磷酸三(1,3-二氯-2-丙基)酯(TDCPP)	13674-87-8	ND	5	
Tris(2-chloroethyl) phosphate(TCEP) 磷酸三(二氯乙基)酯(TCEP)	115-96-8	ND	5	<u></u>
Tris(2,3-dibromopropyl) phosphate(TDBPP) 磷酸三(2,3 二溴丙基)酯(TDBPP)	126-72-7	ND	5	<u></u> -
Hexabromocyclododecane(HBCDD) 六溴环十二烷(HBCDD)	25637-99-4	ND	5	<u></u>
Tris(2-chloro-1-methylethyl) phosphate (TCPP) 磷酸三(1-氯-2-丙基)酯(TCPP)	13674-84-5	ND	5	
Tris[2-chloro-1-(chloromethyl)ethyl] phosphate(TDCP) 磷酸三(1,3-二氯-2-丙基)酯(TDCP)	13674-87-8	ND	5	
Tetrabromobisphenol A (TBBPA) 四溴双酚 A(TBBPA)	79-94-7	ND	5	
Sum of (TDCPP+TCEP+TDBPP+HBCDD) 总和(TDCPP+TCEP+TDBPP+HBCDD)	<u></u>	ND	<u>-</u>	1000
Sum of (TCEP+TCPP+TDCP) 总和(TCEP+TCPP+TDCP)		ND		5
Sum of (HBCDD+TBBPA) 总和(HBCDD+TBBPA)		ND		Ban 不得检出

Note: mg/kg = milligram per kilogram = ppm

备注: mg/kg = 毫克/千克 = 百万分之一

ND = Not Detected (Less than MDL)

ND = 未检测到 (小于 MDL)

MDL = Method Detection Limit

MDL = 方法检测限





No.: EM180514018C Date: May 18, 2018 Page 16 of 18

Test Results: 检测结果:

9. Phthalates contents 邻苯二甲酸酯含量

Test Method: To refer to EN 14372:2004, the analysis was performed by GC-MS.

检测方法: 参照方法 EN 14372:2004, 所得溶液用气相色谱质谱联用仪(GC-MS)进行分析检测。

Analyte 被分析物	CAS No.	Test Result (mg/kg) 结果(mg/kg) White fiber 白色纤维	MDL (%)
Di-n-butyl ortho-phthalate (DBP) 邻苯二甲酸二丁酯(DBP)	84-74-2	ND	30
Butyl benzyl phthalate (BBP) 邻苯二甲酸丁苄酯 (BBP)	85-68-7	ND	30
Di-2-ethylhexyl phthalate (DEHP) 邻苯二甲酸二(2-乙基己基)酯(DEHP)	117-81-7	ND	30
Diisononyl ortho-phthalate (DINP) 邻苯二甲酸二异壬酯(DINP)	28553-12-0 68515-48-0	ND	50
Diisodecyl ortho-phthalate (DIDP) 邻苯二甲酸二异癸酯(DIDP)	26761-40-0 68515-49-1	ND	50
Di-n-octyl phthalate (DNOP) 邻苯二甲酸二正辛酯(DNOP)	117-84-0	ND	30
Di-iso-butyl phthalate (DIBP) 邻苯二甲酸二异丁酯(DIBP)	84-69-5	ND	30
Dicyclohexyl ortho-phthalate (DCHP) 邻苯二甲酸二环已酯(DCHP)	84-61-7	ND	30
Dipentyl phthalate(DPP)(Dnpp) 邻苯二甲酸二戊酯(DPP)(Dnpp)	131-18-0	ND	30
Dihexyl phthalate(DNHP) 邻苯二甲酸二己酯(DNHP)	84-75-3	ND	30
Bis (2-methoxyethyl) phthalate(DMEP) 邻苯二甲酸二(2-甲氧基)乙酯(DMEP)	117-82-8	ND	30
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich 邻苯二甲酸二 C6-8 支链烷基酯(富 C7) (DIHP)	71888-89-6	ND	30
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters 1,2-苯二酸-二(C7-11 支链与直链)烷基酯 (DHNUP)	68515-42-4	ND	30
N-pentyl-isopentylphthalate(NPIP) 邻苯二甲酸正戊基异戊酯(nPiPP)	776297-69-9	ND	30
Diphenyl phthalate(DHP) 邻苯二甲酸二苯酯(DHP)	84-75-3	ND	30
Dinonyl phthalate(DNP) 邻苯二甲酸二壬酯(DNP)	84-76-4	ND	30
Diisooctyl ortho-phthalate (DIOP) 邻苯二甲酸二异辛酯(DIOP)	27554-26-3	ND	50





No.: EM180514018C Date: May 18, 2018 Page 17 of 18

Analyte 被分析物	CAS No.	Test Result (mg/kg) 结果(mg/kg) White fiber 白色纤维	MDL (%)
DiPP(Diisopentylphthalate) 邻苯二甲酸二异戊酯	605-50-5	ND	30
N-pentyl-isopentylphtalate(n-PIPP) 邻苯二甲酸正戊基异戊基酯(n-PIPP)	776297-69-9	ND	30

Note: mg/kg = milligram per kilogram=ppm

备注: mg/kg = 毫克/千克 = 百万分之一

ND = Not Detected (less than MDL)

ND = 未检出 (小于 MDL)

MDL = Method Detection Limit

MDL = 方法检测限





No.: EM180514018C Date: May 18, 2018 Page 18 of 18

Sample Photo 样品照片



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