TEST REPORT

APPLICANT	:	**BOURNS (XIAMEN) LTD** 4/5 F, GUANGYAO BUILDING, TORCH HI-TECH, INDUSTRIAL DEVELOPMENT ZONE, XIAMEN P.R.C.361006
申请人公司名称	:	**柏恩氏（厦门）电子有限公司** 厦门火炬高技术产业开发区光耀楼 4/5 楼
DATE OF SUBMISSION	:	February 6, 2012
样品收取日期	:	2012 年 2 月 6 日
TEST PERIOD	:	February 6, 2012 to February 10, 2012
所需工作周期	:	2012 年 2 月 6 日至 2012 年 2 月 10 日
NO. OF WORKING DAY(S)	:	5
所需工作日	:	5
SAMPLE DESCRIPTION **样品描述**	:	One (1) received sample stated to be HDPE Manufacturer name: Equistar
TESTED ITEM 1	:	White plastic

SUMMARY OF TEST RESULTS 测试结果摘要

TEST REQUESTED 测试项目	CONCLUSION 结论	REMARK 备注
Halogen content 卤素含量测试	-	See results in page 3 结果见第 3 页
European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) 有关欧盟委员会针对电子产品的指令(电子电器禁用某些有害物质指令)，2011/65/EU	PASS 通过	-

REMARK
备注

If there are questions or concerns on this report, please contact the following persons:
若有任何疑问或咨询，可通过下述联络方式与我们联络

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BUREAU VERITAS
CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)
必维国际检验集团 –必维申美商品检测(上海)有限公司

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RW/2012

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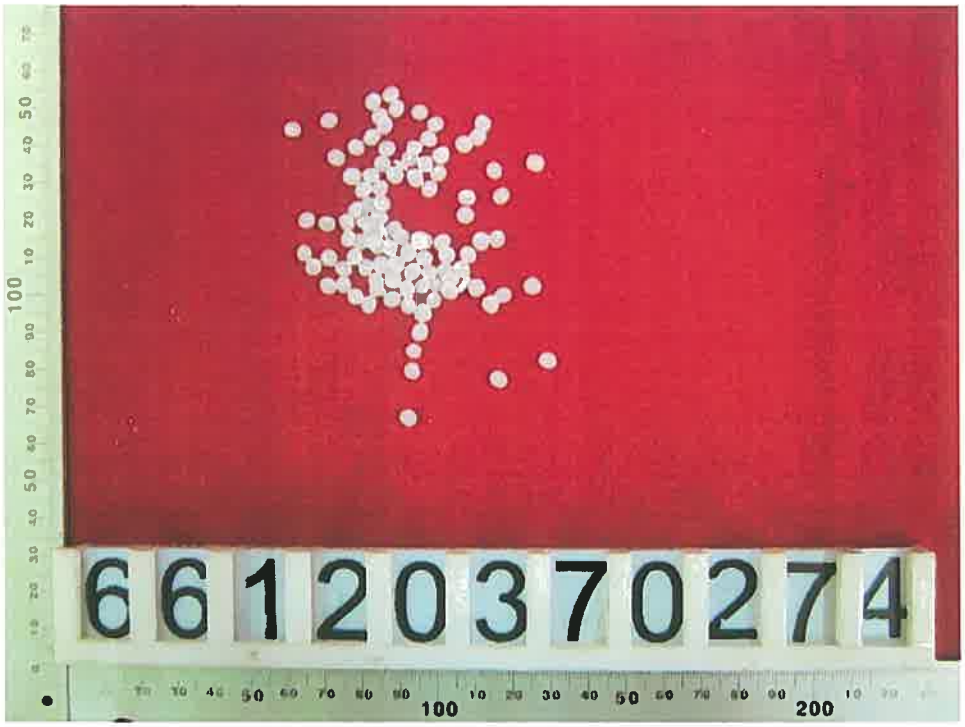
Photo of the Submitted Sample



TEST RESULT
测试结果

I. Halogen (fluorine, chlorine, bromine, iodine) content
I. 卤素（氟、氯、溴、碘）含量

Compounds 化合物	Unit 单位	Result 结果	Laboratory Report Limit 实验室报告界限
		1	
Fluorine 氟	mg/kg	ND	100
Chlorine 氯	mg/kg	ND	50
Bromine 溴	mg/kg	ND	50
Iodine 碘	mg/kg	ND	100

Tested Item 1: 测试项目 1:	White plastic

Note: mg/kg=milligram per kilogram
注释： mg/kg=毫克每千克
"<" = less than
"<" = 小于
Fluorine 氟/ Iodine 碘"ND" = less than 100 mg/kg
Chlorine 氯/ Bromine 溴"ND" = less than 50 mg/kg

Method: Sample was firstly combusted and absorbed with solvent, then analyzed by ion chromatography (reference to EN14582:2007).
方法: 将样品燃烧后用溶剂吸收，然后用离子色谱仪分析。(参照 EN14582:2007)

TEST RESULT 测试结果

II. European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)
II. 有关欧盟委员会针对电子产品的指令 (电子电器禁用某些有害物质指令)，2011/65/EU

Test Method 测试方法 : See Appendix. 见附录。

Test Item 测试项目	Description 描述
1	White plastic

-	Unit 单位	Maximum Allowable Limit (Req.) 最大允许限值 (要求)	Result 结果
Test Item 测试项目	-	-	1
Parameter 参数	-	-	-
Lead (Pb)铅	mg/kg	1000	ND
Cadmium (Cd)镉	mg/kg	100	ND
Mercury (Hg)汞	mg/kg	1000	ND
Chromium VI (Cr VI)六价铬	mg/kg	1000	ND
MonoBB 一溴联苯	mg/kg		ND
DiBB 二溴联苯	mg/kg		ND
TriBB 三溴联苯	mg/kg		ND
TetraBB 四溴联苯	mg/kg		ND
PentaBB 五溴联苯	mg/kg		ND
HexaBB 六溴联苯	mg/kg		ND
HeptaBB 七溴联苯	mg/kg		ND
OctaBB 八溴联苯	mg/kg		ND
NonaBB 九溴联苯	mg/kg		ND
DecaBB 十溴联苯	mg/kg		ND
Sum of PBBs 多溴联苯总和	mg/kg	1000	ND
MonoBDE 一溴联苯醚	mg/kg		ND
DiBDE 二溴联苯醚	mg/kg		ND
TriBDE 三溴联苯醚	mg/kg		ND
TetraBDE 四溴联苯醚	mg/kg		ND
PentaBDE 五溴联苯醚	mg/kg		ND
HexaBDE 六溴联苯醚	mg/kg		ND
HeptaBDE 七溴联苯醚	mg/kg		ND
OctaBDE 八溴联苯醚	mg/kg		ND
NonaBDE 九溴联苯醚	mg/kg		ND
DecaBDE 十溴联苯醚	mg/kg		ND
Sum of PBDEs 多溴联苯醚总和	mg/kg	1000	ND
Conclusion 结论	-	-	PASS 通过

Note / Key 注释:

ND = Not detected 未检出 ">" = Greater than 大于 Req. = Requirement 要求
mg/kg = milligram(s) per kilogram 毫克每千克 EX = Exempted 豁免
Detection Limit 检出限(mg/kg) :
Each (Pb, Cd, Hg & Cr VI) 2 各 (铅, 镉, 汞和六价铬) 2;
Each PBBs 50; Each PBDEs 50 各多溴联苯 50; 各多溴联苯醚 50

Remark 备注:

- The list of analytes is summarized in table of Appendix. 分析物列表 – 见附录。
- The test flowchart of heavy metals and flame retardants content is listed in table of Appendix. 重金属和阻燃剂含量的测试流程图 – 见附录
- Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Council Directive 2011/65/EU, Article 4(1).
  金属材料的六价铬结果以阴性和阳性表示。阴性表示六价铬未被检出在测试表面，即结果被认为符合 2011/65/EU 指令中，条款 4(1) 的要求。而阳性则表示六价铬存在在测试表面，即不符合 2011/65/EU 指令中，条款 4(1)的要求。
- According to European Council Directive 2011/65/EU, Article 5 "Adaptation of the Annexes to scientific and technical progress", exemption(s) should be granted to the materials and components of Test Item(s) in the lists in Annexes III and IV of this directive.
  根据欧盟委员会 2011/65/EU 指令中，条款 5"适应科学技术进步的附件"，附件 III 和 IV 中列明的测试项目中的材料和部件可予以豁免。

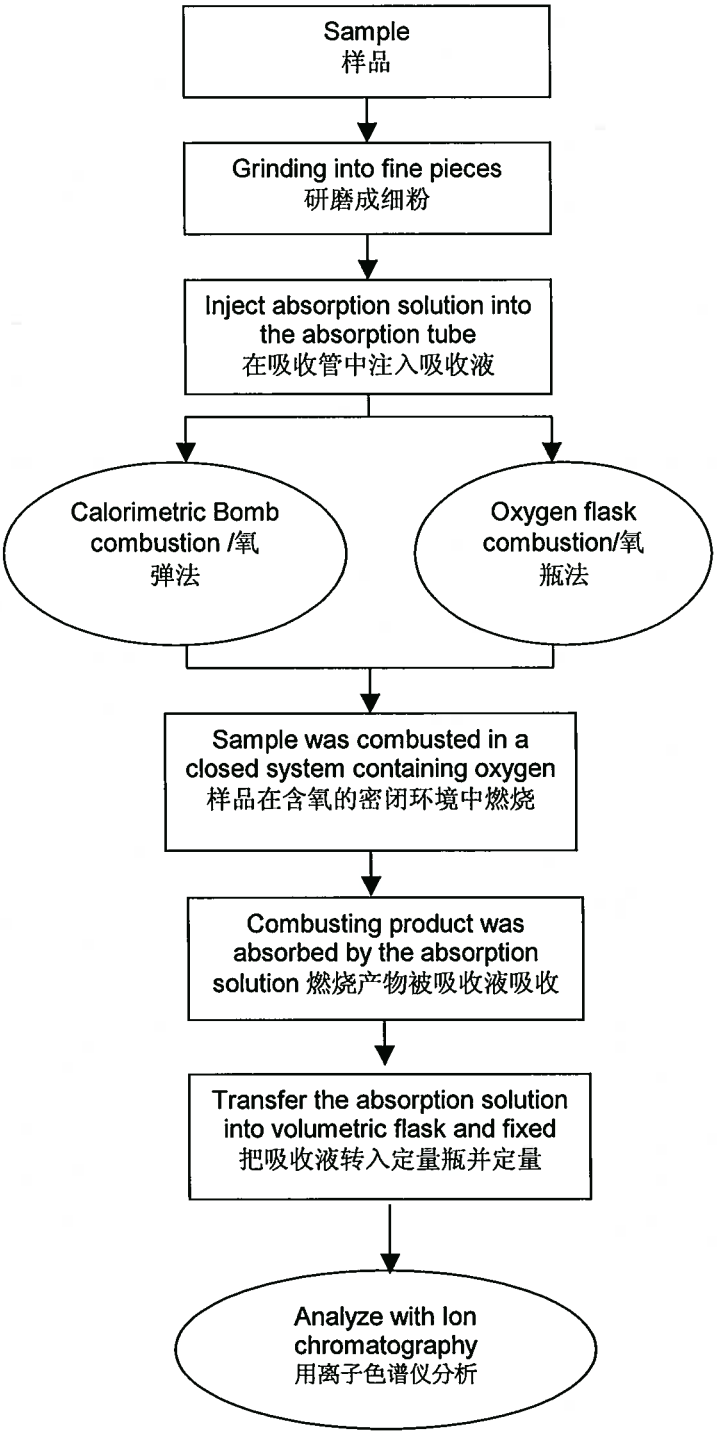
END

APPENDIX 附录

List of Analytes and their Corresponding Test Methods [European Council Directive 2011/65/EU] : 分析物名单及其相应的测试方法 [欧盟委员会指令 2011/65/EU]:		
No.	**Name of Analytes 分析物名称**	**Test Method(s) 测试方法**
1	Lead (Pb) 铅	With reference to EN 62321: 2009, Clauses 8, 9 and 10. 参照 EN 62321: 2009, Clauses 8, 9 and 10.
2	Cadmium (Cd) 镉	
3	Mercury (Hg) 汞	With reference to EN 62321: 2009, Clause 7. 参照 EN 62321: 2009, Clause 7.
4	Chromium VI (Cr VI) 六价铬	Metal 金属: With reference to EN 62321: 2009, Annex B[a]. 参照 EN 62321: 2009, Annex B[a]. Polymers & Electronics 聚合物及电子: With reference to EN 62321: 2009, Annex C. 参照 EN 62321: 2009, Annex C.
5	Polybromobiphenyls (PBBs) 多溴联苯 - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	With reference to EN 62321: 2009, Annex A. 参照 EN 62321: 2009, Annex A.
6	Polybromodiphenyl ethers (PBDEs) 多溴联苯醚 - Bromodiphenyl ether (MonoBDE) - Dibromodiphenyl ether (DiBDE) - Tribromodiphenyl ether (TriBDE) - Tetrabromodiphenyl ether (TetraBDE) - Pentabromodiphenyl ether (PentaBDE) - Hexabromodiphenyl ether (HexaBDE) - Heptabromodiphenyl ether (HeptaBDE) - Octabromodiphenyl ether (OctaBDE) - Nonabromodiphenyl ether (NonaBDE) - Decabromodiphenyl ether (DecaBDE)	
[a]	The principle of this method was evaluated and supported by two studies organized by IEC TC 111 WG3. These studies were focused on detecting the presence of Cr VI in the corrosion protection coatings on metallic samples. 该方法的原理是在由 IEC TC111 WG3 组织的两次研究中得到了充分评估并获得了认可。这些研究侧重于对金属样品上防腐涂层中六价铬的存在的检测(定性测试)。	

APPENDIX
附录

Test Procedures Flow Chart for the determination of Halogen



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APPENDIX 附录

Test Flowchart of Heavy Metals and Flame Retardants Content [European Council Directive 2011/65/EU] :
重金属和阻燃剂的测试流程图[欧盟委员会指令 2011/65/EU]: