TEST REPORT

LAB NO. : (6625)356-1372
DATE : December 25, 2025

Applicant 申请人公司名称:
DONGGUAN CHUANGHUI ELECTRONICS CO., LTD.
东莞市创慧电子有限公司
4TH JINKE SOUTH ROAD,XIEGANG TOWN,DONGGUAN,GUANGDONG,PRC
广东省东莞市谢岗镇谢岗金科南路 4 号

Date of Submission 样品收取日期: 2025-12-22
Test Period 所需工作周期: 2025-12-22 to 2025-12-25
Sample Mode 来样方式: Sample Presentation 委托单位送样
BV EE Ref. No. BV 参考编号: /

Sample Description 样品描述:	Sample(s) received is(are) stated to be 收到的送测样品为: 铝电解电容器、黑色、绿色、红色、银色		
Manufacturer 制造商:	东莞市创慧电子有限公司	Buyer 买家:	/
Style No(s) 款号:	适用于所有液态电容、固态电容、牛角电容、贴片电容	PO No. 采购订单号:	/
Country of Origin 原产地:	中国. 广东. 东莞	Country of Destination 目的地:	Oversea Country

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

General enquiry and invoicing
其他问题
俞文杰 先生/陈燕 小姐/ Mr. Speed Yu/ Ms. Cabell Chen
(021) 24166888*6832/6850
Speed.yu @bureauveritas.com/ Cabell.chen @bureauveritas.com

Technical enquiry
技术问题
余克刚 / 何丹青 先生 Mr. Gorden Yu/ Ken He
(021) 24166888*6852/6859
Gorden.yu@bureauveritas.com/ Kenny.he@bureauveritas.com

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

Laboratory Test Location 实验室检测地址:
No.368,Guangzhong Road, Zhuanqiao Town, Minhang, Shanghai 上海市闵行区光中路 368 号
No.168,Guanghua Road, Zhuanqiao Town, Minhang, Shanghai 上海市闵行区光华路 168 号

PREPARED BY: Mike Shi
制定：

APPROVED BY:
批准：
叶铭 Connie Ye
化学部技术专员 Analytical Technical Specialist

Bureau Veritas
Consumer Products Services Division
(Shanghai)
No.168, Guanghua Road , Zhuanqiao Town,
Minhang, Shanghai, China.
Post Code: 201108
Tel: 86-21-24166888 Fax: 86-21-64890042
Email: bvcps_sh_info@cn.bureauveritas.com
Http: www. bureauveritas.com/cps

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

SUMMARY OF TEST RESULTS 测试结果摘要

TEST REQUESTED	CONCLUSION
Heavy Metals Content – European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments & As Applicant's requirement 重金属含量 - 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 及其修订条款 & 按照客户要求	PASS 通过
European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments (EU) 2015/863 & As Applicant's requirement 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 及其修订条款 (EU) 2015/863 & 按照客户要求	PASS 通过

Note 注释: Testing as sample submitted by client, this test report is only responsible for the conformity of the tested items. The client is responsible for the representative and authenticity of the submitted samples.
对委托来样检测，本检测报告仅对所检项目的符合性负责，送检样品的代表性和真实性由委托人负责。
The tested part of the sample was specified by client. 样品的测试部位由客户指定。
The test conclusion was given based on the results of tested part. 结论基于测试部位结果。

Sample Description Assigned by Laboratory:
实验室对样品的描述:

Test Item 测试项目	Description 描述
1	Silvery metal
2	Grey metal
3	Black metal
4	Silvery metal
5	Silvery metal
6	Silvery metal
7	Silvery metal
8	Silvery metal
9	Brown plastic
10	Brown paper
11	Black plastic
12	Black plastic
13	Black/ white plastic with printing
14	Black plastic
15	Yellow plastic
16	Red ink
17	Brown oil
18	Black ink
19	Silvery metal

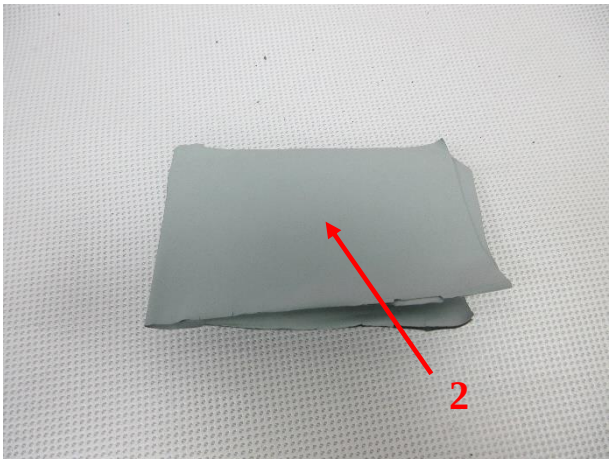
Note 注释:
g = gram(s) 克
mcg = microgram(s) 微克
mg/kg = milligram per kilogram 毫克每千克
mg/L = milligram per litre 毫克每升
MDL = Method Detection Limit 方法检测限
ND = Not Detected (< MDL) 未检出
EX = Exempted 豁免
% = percentage 百分比
1 mg/kg = 0.0001%
"<" = less than 小于
">" = Greater than 大于
Req. = Requirement 要求
"-" = Not Regulated 未规定
NA = Not applicable 不适用

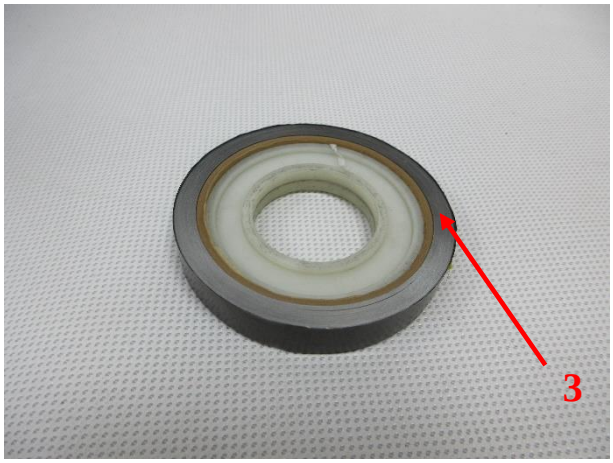
Photo of the Submitted Sample
递交样品照片

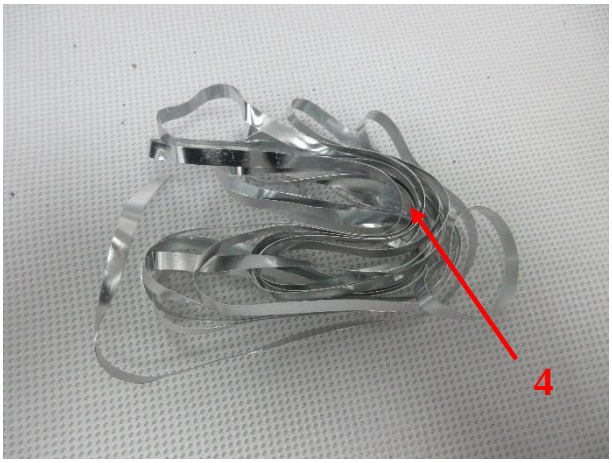


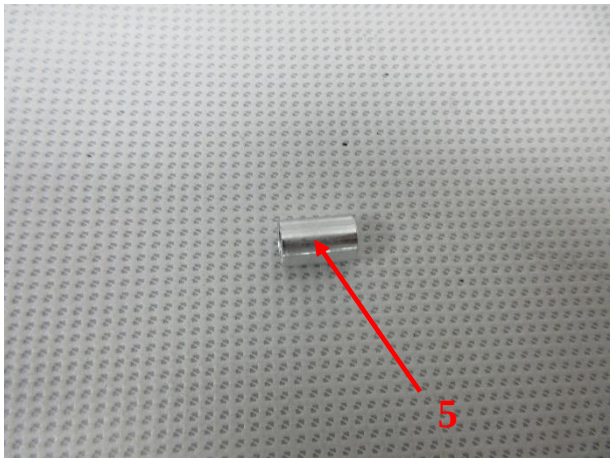
Photo of the Submitted Sample
递交样品照片

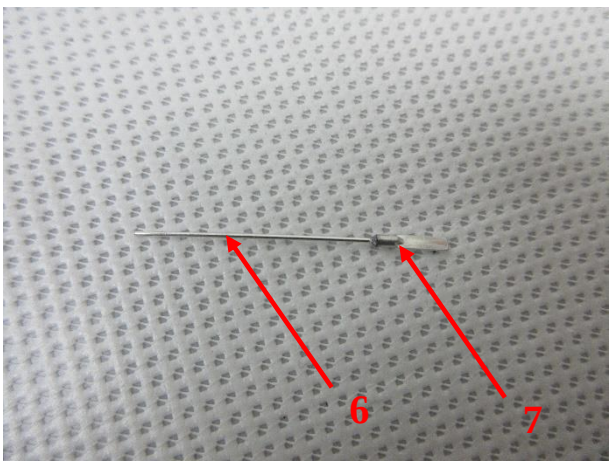


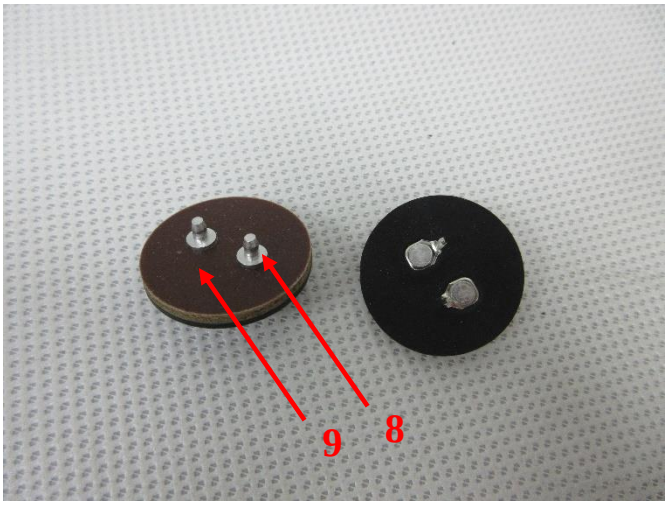


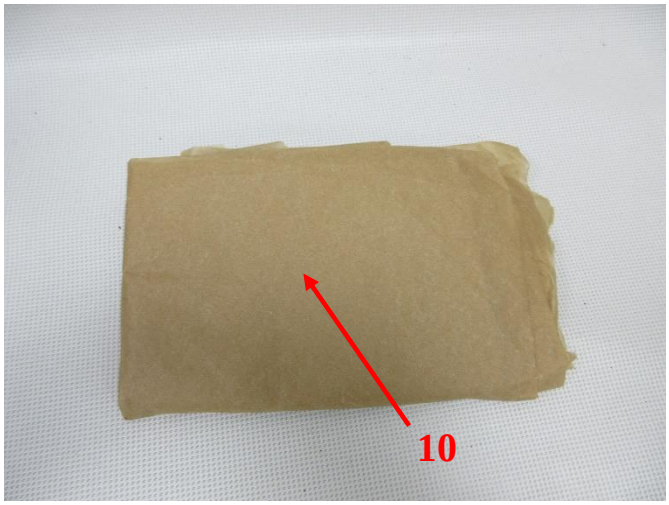


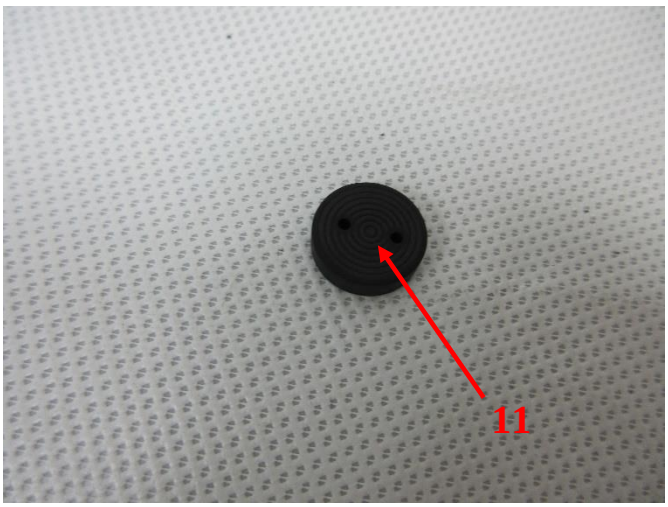


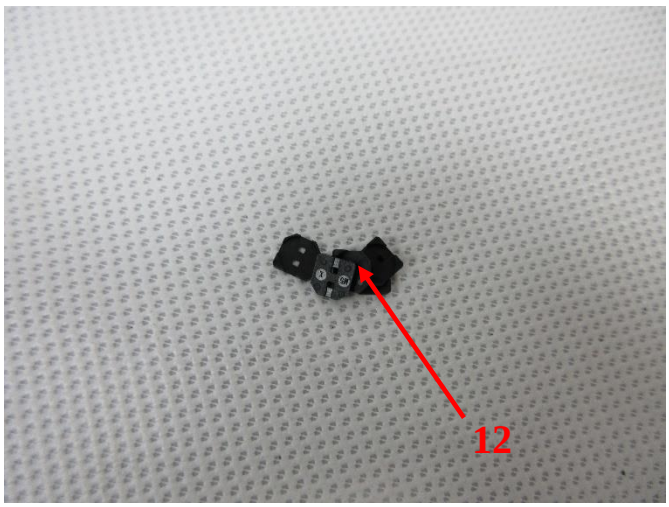


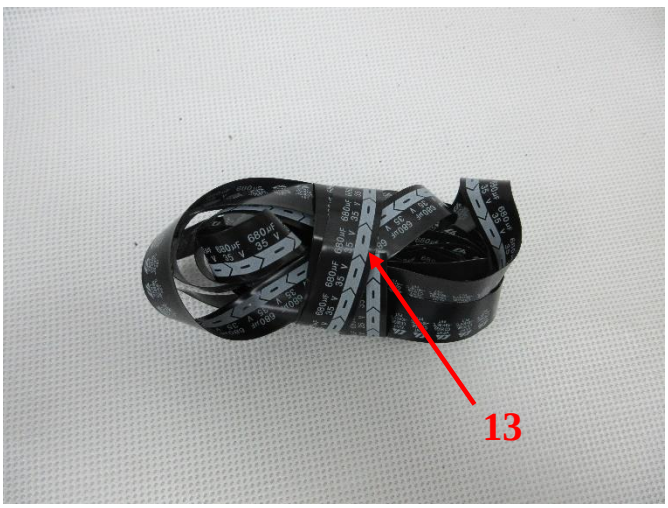


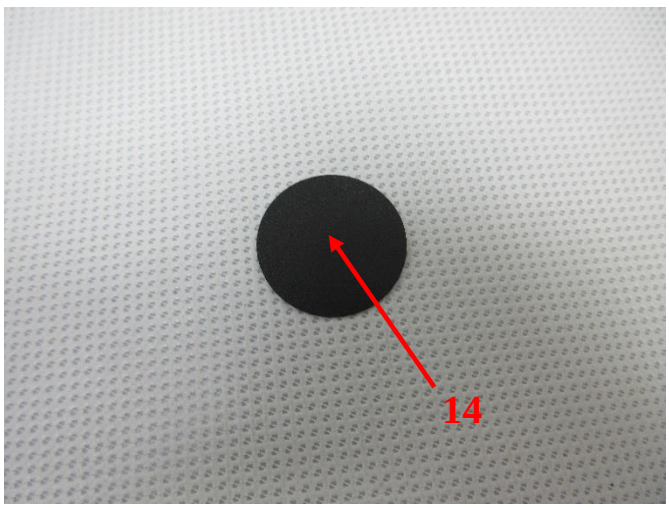

9
8

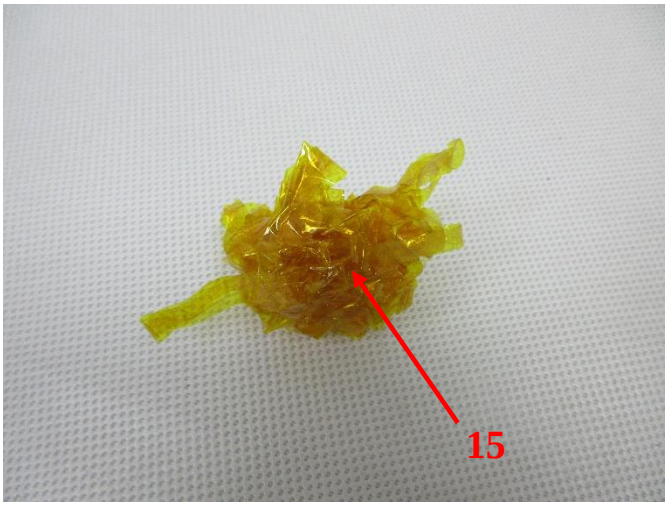

10

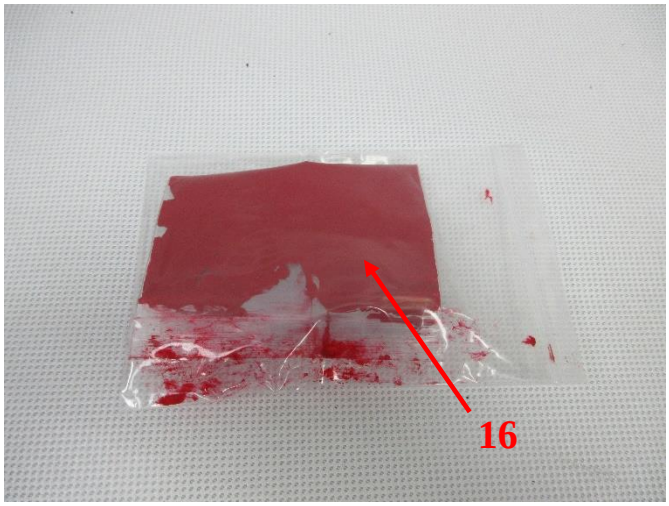

11

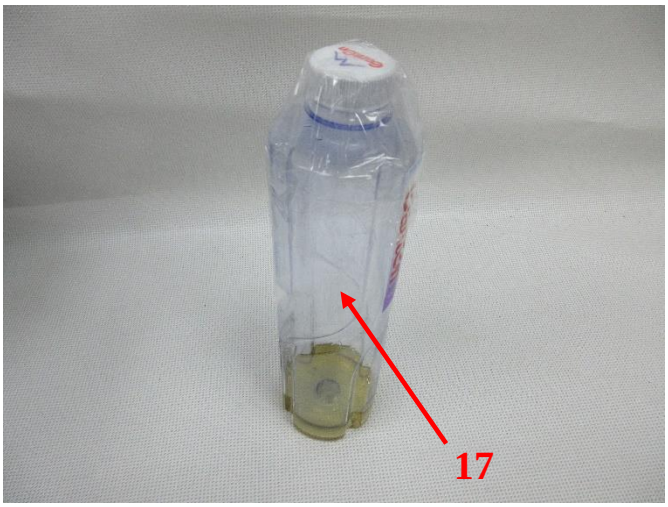

12

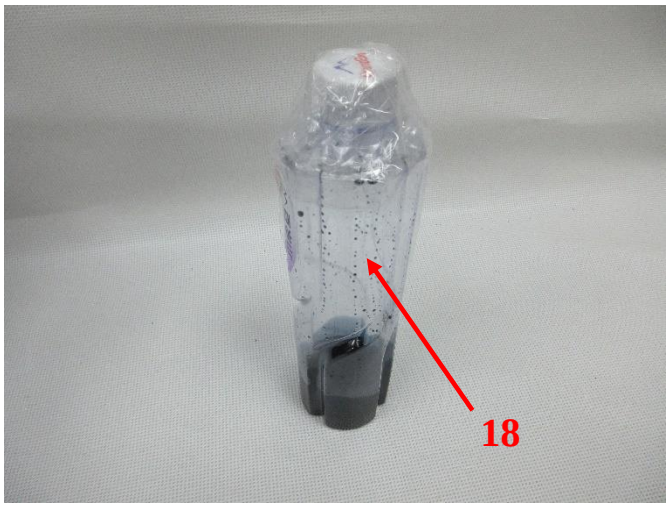

13

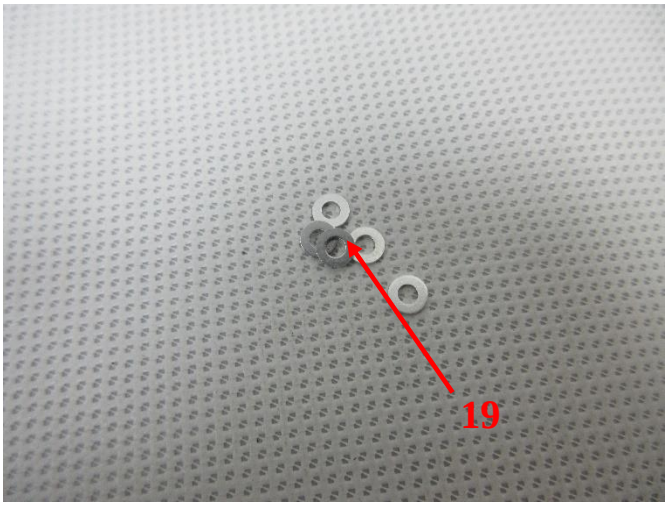

14


15


16


17


18


19

/

TEST RESULT 测试结果

Heavy Metals Content - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments & As Applicant's requirement
重金属含量 - 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 及其修订条款 & 按照客户要求

Test Method 测试方法 : See Appendix. 见附录。

-	Unit 单位	MDL 方法检测限	Maximum Allowable Limit (Req.) 最大允许限值 (要求)	Result 结果			
Test Item 测试项目	-	-	-	**1**	**2**	**3**	**4**
Parameter 参数	-	-	-	-	-	-	-
Lead (Pb)铅	mg/kg	2	600	3.35	2.97	4.85	ND
Cadmium (Cd)镉	mg/kg	2	60	ND	ND	ND	ND
Mercury (Hg)汞	mg/kg	2	600	ND	ND	ND	ND
Chromium VI (Cr VI)六价铬	-	-	Negative	Negative	Negative	Negative	Negative
Conclusion 结论	-	-	-	PASS 通过	PASS 通过	PASS 通过	PASS 通过

-	Unit 单位	MDL 方法检测限	Maximum Allowable Limit (Req.) 最大允许限值 (要求)	Result 结果			
Test Item 测试项目	-	-	-	**5**	**6**	**7**	**8**
Parameter 参数	-	-	-	-	-	-	-
Lead (Pb)铅	mg/kg	2	600	10.8	11.7	10.5	15.6
Cadmium (Cd)镉	mg/kg	2	60	ND	ND	ND	ND
Mercury (Hg)汞	mg/kg	2	600	ND	ND	ND	ND
Chromium VI (Cr VI)六价铬	-	-	Negative	Negative	Negative	Negative	Negative
Conclusion 结论	-	-	-	PASS 通过	PASS 通过	PASS 通过	PASS 通过

TEST RESULT 测试结果

Heavy Metals Content - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments & As Applicant's requirement
重金属含量 - 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 及其修订条款 & 按照客户要求

Test Method 测试方法 : See Appendix. 见附录。

-	Unit 单位	MDL 方法检测限	Maximum Allowable Limit (Req.) 最大允许限值 (要求)	Result 结果
Test Item 测试项目	-	-	-	**19**
Parameter 参数	-	-	-	-
Lead (Pb)铅	mg/kg	2	600	ND
Cadmium (Cd)镉	mg/kg	2	60	ND
Mercury (Hg)汞	mg/kg	2	600	ND
Chromium VI (Cr VI)六价铬	-	-	Negative	Negative
Conclusion 结论	-	-	-	PASS 通过

Remark 备注:

- The list of analytes is summarized in table of Appendix. 分析物列表 – 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 Parliament and 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 Parliament and 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 Parliament and 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。

TEST RESULT

European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments (EU) 2015/863 & As Applicant's requirement
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 及其修订条款 (EU) 2015/863 & 按照客户要求

Test Method 测试方法 : See Appendix. 见附录。

-	Unit 单位	MDL 方法检测限	Maximum Allowable Limit (Req.) 最大允许限值 (要求)	Result 结果				
Test Item 测试项目	-	-	-	**9**	**10**	**11**	**12**	**13**
Parameter 参数	-	-	-	-	-	-	-	-
Lead (Pb)铅	mg/kg	2	600	ND	ND	4.77	ND	ND
Cadmium (Cd)镉	mg/kg	2	60	ND	ND	ND	ND	ND
Mercury (Hg)汞	mg/kg	2	600	ND	ND	ND	ND	ND
Chromium VI (Cr VI)六价铬	mg/kg	8	600	ND	ND	ND	ND	ND
MonoBB 一溴联苯	mg/kg	5		ND	ND	ND	ND	ND
DiBB 二溴联苯	mg/kg	5		ND	ND	ND	ND	ND
TriBB 三溴联苯	mg/kg	5		ND	ND	ND	ND	ND
TetraBB 四溴联苯	mg/kg	5		ND	ND	ND	ND	ND
PentaBB 五溴联苯	mg/kg	5		ND	ND	ND	ND	ND
HexaBB 六溴联苯	mg/kg	5		ND	ND	ND	ND	ND
HeptaBB 七溴联苯	mg/kg	5		ND	ND	ND	ND	ND
OctaBB 八溴联苯	mg/kg	5		ND	ND	ND	ND	ND
NonaBB 九溴联苯	mg/kg	5		ND	ND	ND	ND	ND
DecaBB 十溴联苯	mg/kg	5		ND	ND	ND	ND	ND
Sum of PBBs 多溴联苯总和	mg/kg	-	600	ND	ND	ND	ND	ND
MonoBDE 一溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
DiBDE 二溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
TriBDE 三溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
TetraBDE 四溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
PentaBDE 五溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
HexaBDE 六溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
HeptaBDE 七溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
OctaBDE 八溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
NonaBDE 九溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
DecaBDE 十溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
Sum of PBDEs 多溴二苯醚总和	mg/kg	-	600	ND	ND	ND	ND	ND
Dibutyl phthalate (DBP) 邻苯二甲酸二丁酯	mg/kg	50	600	ND	ND	ND	ND	ND
Butyl benzyl phthalate (BBP) 邻苯二甲酸丁基苄基酯	mg/kg	50	600	ND	ND	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP) 邻苯二甲酸二(2-乙基己基)酯	mg/kg	50	600	ND	ND	ND	ND	ND
Diisobuty phthalate (DIBP) 邻苯二甲酸二异丁酯	mg/kg	50	600	ND	ND	ND	ND	ND
Conclusion 结论	-	-	-	PASS 通过	PASS 通过	PASS 通过	PASS 通过	PASS 通过

TEST RESULT

European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments (EU) 2015/863
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 及其修订条款 (EU) 2015/863

Test Method 测试方法 : See Appendix. 见附录。

-	Unit 单位	MDL 方法检测限	Maximum Allowable Limit (Req.) 最大允许限值 (要求)	Result 结果				
Test Item 测试项目	-	-	-	**14**	**15**	**16**	**17**	**18**
Parameter 参数	-	-	-	-	-	-	-	-
Lead (Pb)铅	mg/kg	2	600	ND	ND	ND	ND	ND
Cadmium (Cd)镉	mg/kg	2	60	ND	ND	ND	ND	ND
Mercury (Hg)汞	mg/kg	2	600	ND	ND	ND	ND	ND
Chromium VI (Cr VI)六价铬	mg/kg	8	600	ND	ND	ND	ND	ND
MonoBB 一溴联苯	mg/kg	5		ND	ND	ND	ND	ND
DiBB 二溴联苯	mg/kg	5		ND	ND	ND	ND	ND
TriBB 三溴联苯	mg/kg	5		ND	ND	ND	ND	ND
TetraBB 四溴联苯	mg/kg	5		ND	ND	ND	ND	ND
PentaBB 五溴联苯	mg/kg	5		ND	ND	ND	ND	ND
HexaBB 六溴联苯	mg/kg	5		ND	ND	ND	ND	ND
HeptaBB 七溴联苯	mg/kg	5		ND	ND	ND	ND	ND
OctaBB 八溴联苯	mg/kg	5		ND	ND	ND	ND	ND
NonaBB 九溴联苯	mg/kg	5		ND	ND	ND	ND	ND
DecaBB 十溴联苯	mg/kg	5		ND	ND	ND	ND	ND
Sum of PBBs 多溴联苯总和	mg/kg	-	600	ND	ND	ND	ND	ND
MonoBDE 一溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
DiBDE 二溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
TriBDE 三溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
TetraBDE 四溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
PentaBDE 五溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
HexaBDE 六溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
HeptaBDE 七溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
OctaBDE 八溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
NonaBDE 九溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
DecaBDE 十溴二苯醚	mg/kg	5		ND	ND	ND	ND	ND
Sum of PBDEs 多溴二苯醚总和	mg/kg	-	600	ND	ND	ND	ND	ND
Dibutyl phthalate (DBP) 邻苯二甲酸二丁酯	mg/kg	50	600	ND	ND	ND	ND	ND
Butyl benzyl phthalate (BBP) 邻苯二甲酸丁基苄基酯	mg/kg	50	600	ND	ND	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP) 邻苯二甲酸二(2-乙基己基)酯	mg/kg	50	600	ND	ND	ND	ND	ND
Diisobuty phthalate (DIBP) 邻苯二甲酸二异丁酯	mg/kg	50	600	ND	ND	ND	ND	ND
Conclusion 结论	-	-	-	PASS 通过	PASS 通过	PASS 通过	PASS 通过	PASS 通过

Remark 备注:

- The list of analytes is summarized in table of Appendix. 分析物列表 – 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 Parliament and 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 Parliament and 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 Parliament and 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
结束

APPENDIX 附录

List of Analytes and their Corresponding Test Methods [European Parliament and 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 IEC 62321-5: 2013. 参照 IEC 62321-5: 2013.
2	Cadmium (Cd) 镉	
3	Mercury (Hg) 汞	With reference to IEC 62321-4: 2013+AMD1: 2017. 参照 IEC 62321-4: 2013+AMD1: 2017.
4	Chromium VI (Cr VI) 六价铬	Metal 金属: With reference to IEC 62321-7-1:2015. 参照 IEC 62321-7-1: 2015. Polymers & Electronics 聚合物及电子件: With reference to IEC 62321-7-2: 2017. 参照 IEC 62321-7-2: 2017. Leather 皮革: ISO 17075: 2017
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 IEC 62321-6:2015. 参照 IEC 62321-6:2015.
6	Polybromodiphenyl ethers (PBDEs) 多溴二苯醚 - 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)	
7	Dibutyl phthalate (DBP) 邻苯二甲酸二丁酯 Butyl benzyl phthalate (BBP) 邻苯二甲酸丁基苄基酯 Di-2-ethylhexyl phthalate (DEHP) 邻苯二甲酸二(2-乙基己基)酯 Diisobuty phthalate (DIBP) 邻苯二甲酸二异丁酯	Reference to IEC 62321-8: 2017. 参照 IEC 62321-8: 2017.