BUREAU VERITAS
Consumer Product Services Germany GmbH

AKS Akkreditiertes Prüflaboratorium
Register-Nr. AKS-P-21303-EU
Staatliche Akkreditierungsstelle Hannover

Bescheinigung über RoHS Anforderungen Verifizierung
Certificate of RoHS Verification

Kunde :	Shenzhen Svavo Bathroom Products Co., Ltd
Applicant:	深圳市瑞沃卫浴制品有限公司
Ansprechpartner :	Catherine Wong
Contact person:	王燕平
Datum des Berichtes	August 20, 2007
Date of report:	
Kunden Referenz *:*	/
Client Reference	

Artikel Nr. : *Article No.:*	/	**BVCPS Labor Nr.** *BVCPS reference no.*	**(5507)226-2483**
Artikel Beschreibung *Article description*	/	**Probenbescheibung :** *Sample Description :*	Automatic Soap Dispenser

Verification assessment according to RoHS Directive 2002/95/EC		
WEEE Classification	**II**	**Small Household Appliances**

Das Produkt erfüllt nach den durchgeführten Untersuchungen die Anforderungen der RoHS Richtlinie 2002/95/EC
The product fullfills the requirements of the RoHS Directive 2002/95/EC

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Bureau Veritas Consumer Product Services Germany GmbH

TEST REPORT

LAB NO. 报告号 : (5507)226-2483
DATE 日期 : August 16, 2007
PAGE 页码 : 1 OF 5

APPLICANT **申请人公司名称**	:	**Shenzhen Svavo Bathroom Products Co., Ltd** **深圳市瑞沃卫浴制品有限公司** No. 4 Factory, Xinwu Industrial Estate, Shabo, Pingshan Street, Longgang District, Shenzhen 深圳龙岗区坪山街道沙博新屋工业区 4 号厂
CONTACT PERSON **联系人名称**	:	Catherine Wong 王燕平
DATE OF SUBMISSION **样品收取日期**	:	August 14, 2007
TEST PERIOD **所需工作周期**	:	August 14, 2007 to August 16, 2007
NO. OF WORKING DAY(S) **所需工作日**	:	3
LCIE REF. NO.	:	KFA07JU26-01HKHHVC-A1
SAMPLE DESCRIPTION **样品描述**	:	Automatic Soap Dispenser Color: White Model no.: V-410 Manufacturer: Shenzhen Svavo Bathroom Products Co., Ltd. Buyer: Kingfisher Country of origin: China Country of destination: China

SUMMARY OF TEST RESULTS 测试结果摘要

TEST REQUESTED 测试项目	PASS 通过	FAIL 不通过	REMARK 备注
Verification Testing of Restriction of Hazardous Substances Directive (RoHS), 2002/95/EC 有关欧洲针对电子产品的指令（电子电器禁用某些有害物质指令）, 2002/95/EC, 验证测试	**X**		

REMARK 备注

If there are questions or concerns on this report, please contact: (852) 2494-4604
若有任何疑问或咨询，可通过下述联络方式与我们联络 rohs.enquiry@hk.bureauveritas.com

BUREAU VERITAS HONG KONG LIMITED
立德国际公證香港有限公司

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LA-11392

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Photo of the Submitted Sample
递交样品照片

TEST RESULT 测试结果

Restriction of Hazardous Substances Directive (RoHS), 2002/95/EC, Verification Tests
有关欧洲针对电子产品的指令（电子电器禁用某些有害物质指令）, 2002/95/EC, 验证测试

Plastic Components 塑料部件

Test Item 测试项目	Description 描述	Part No. 部件编号	Test Parameter 测试参数 [ppm]					Result 结果
			Pb 铅	Hg 汞	Cd 镉	Cr 铬	Br 溴	
1	All plastic components	/	< 100	< 100	< 50	< 100	< 100	PASS 通过

PCB and Electronic Components PCB 和电子元件

Test Item 测试项目	Description 描述	Part No. 部件编号	Test Parameter 测试参数 [ppm]					Result 结果
			Pb 铅	Hg 汞	Cd 镉	Cr 铬	Br 溴	
2	Black body (diode "D3", PCB "GC0613A")	55	694000#	< 100	< 50	< 100	< 100	EXEMPTED# 豁免#
3	Black/ white body (SMD resistor "R1-R16", PCB "GC0613A")	57-62, 64, 67, 69-71, 73, 74, 77, 79	11600#	< 100	< 50	< 100	< 100	EXEMPTED# 豁免#
4	All other PCB and electronic components	/	< 100	< 100	< 50	< 100	< 100	PASS 通过

Cables and Cable Insulations 电缆和电缆绝缘体

Test Item 测试项目	Description 描述	Part No. 部件编号	Test Parameter 测试参数 [ppm]					Result 结果
			Pb 铅	Hg 汞	Cd 镉	Cr 铬	Br 溴	
5	All cables and cable insulations	/	< 100	< 100	< 50	< 100	< 100	PASS 通过

Metal Components 金属部件

Test Item 测试项目	Description 描述	Part No. 部件编号	Test Parameter 测试参数 [ppm]					Result 结果
			Pb 铅	Hg 汞	Cd 镉	Cr 铬	Br 溴	
6	Silvery solder (rotor, motor)	40	< 100	< 100	< 50	< 100	NA	PASS 通过
7	All other metal components	/	< 100	< 100	< 50	Negative2) 阴性	NA	PASS 通过

TEST RESULT 测试结果

Restriction of Hazardous Substances Directive (RoHS), 2002/95/EC, Verification Tests
有关欧洲针对电子产品的指令（电子电器禁用某些有害物质指令）, 2002/95/EC, 验证测试

Remaining Materials 其它材料

Test Item 测试项目	Description 描述	Part No. 部件编号	Test Parameter 测试参数 [ppm]					Result 结果
			Pb 铅	Hg 汞	Cd 镉	Cr 铬	Br 溴	
8	All remaining materials	/	411	< 100	< 50	< 100	< 100	PASS 通过

For item 2:
#According to the directive 2005/717/EC, 2005/747/EC and 2006/310/EC, the annex of 2002/95/EC was amended and Clause 7 is reiterated here "Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)." The sample as received was provided by the client to be high melting temperature type solder, therefore, this material containing the found heavy metals level should be exempted.
#根据指令 2005/717/EC, 2005/747/EC 和 2006/310/EC，2002/95/EC 的附件被修订，并重申第 7 条“高温融化型焊料中的铅（即锡铅焊料合金，铅含量占重量的 85%以上）”。根据客户提供，测试样品为高温融化型焊料，因此，含有被测得的重金属水平的该材料可以被豁免。

For item 3:
#According to the directive 2005/717/EC, 2005/747/EC and 2006/310/EC, the annex of 2002/95/EC was amended and Clause 7 is reiterated here "Lead in electronic ceramic parts (e.g. piezoelectronic devices)." The sample as received was provided by the client to be electronic ceramic parts, therefore, this material containing the found heavy metals level should be exempted.
#根据指令 2005/717/EC, 2005/747/EC 和 2006/310/EC，2002/95/EC 的附件被修订，并重申第 7 条“电子陶瓷零件（即压电电子设备）中的铅”。根据客户提供，测试样品为电子陶瓷零件，因此，含有被测得的重金属水平的该材料可以被豁免。

Note/ 注释:
Limit of Restriction of Hazardous Substances Directive (RoHS), 2005/618/EC:
RoHS 禁用有害物质指令的最高限值，2005/618/EC:

Elements 元素	RoHS' Limits (ppm) RoHS'建议最高界限(ppm)
Pb 铅	1000
Hg 汞	1000
Cd 镉	100
CrVI 六价铬	1000
PBBs 多溴联苯	1000
PBDEs 多溴联苯醚	1000

ppm = mg/kg 毫克/千克 < = less than 小于等于 ND = not detected 未检出 NA = not applicable 不适用
Pb = Lead 铅 Hg = Mercury 汞 Cd = Cadmium 镉 Cr = Chromium 铬
Br = Bromine 溴 PBBs = Polybrominated Biphenyls 多溴联苯 PBDEs = Polybrominated Diphenyl Ethers 多溴联苯醚

Test Method/ 测试方法:

1. XRF Screening - IEC 62321/54/CDV, Procedures for the determination of levels of regulated substances in electrotechnical products (Chapter 6)
   XRF 扫描 - IEC 62321/54/CDV, 在电工产品中常规受限物质的检测步骤（第 6 章）或者：
2. Wet Chemistry Tests – Reference to IEC 62321/54/CDV, "Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products"
   湿化学方法 – 参照 IEC 62321/54/CDV: "在电工产品中常规受限物质的检测步骤"
   i. Lead (Pb) and Cadmium (Cd): The sample is comminuted and digested with acid mixtures. Pb/ Cd contents are determined with ICP-AES technique. (Chapter 11, 12 & 13)
      铅和镉: 先将样品粉碎，然后用混酸消解。铅/镉的含量由等离子发射光谱仪测定（第 11，12 和 13 章）。
   ii. Mercury (Hg): The sample is comminuted and digested with acid mixtures. Hg content is determined with ICP-AES, ICP-MS or AAS-VGA technique. (Chapter 10)
      汞：先将样品粉碎，然后用混酸消解。汞含量由离子发射光谱仪，或者原子吸收分光光度计-氢化物发生装置测定。（第 10 章）
   iii. Chromium (VI) (Cr VI) 六价铬:
      A. Metal: Qualitative method for the presence of hexavalent chromium on metal surface on "Test for the presence of Hexavalent Chromium (CrVI) in colorless and colored chromated coating on metals". The presence of hexavalent chromium is indicated by the formation of a red-violet color. The method is applied in turn to 1) untreated surface; 2) surface finely abraded to remove any reduced chromate surface but not remove the whole chromate layer; 3) surface vigorously abraded to exposure deeper layers. The sample is further verified by boiling water extraction method if the spot test result is uncertain. (Chapter 8)
         金属：金属表面六价铬存在的定性方法"在无色和有色铬镀层金属表面六价铬（Cr VI）存在的测试"。测试颜色呈红－紫色，则表明六价铬的存在。该方法适用于 1）未磨损过的表面；2）轻微磨损过的表面，以去除可能被还原的铬表面，但不去除整个铬镀层；3)用力磨损的表面，以暴露深层基材。如果点测试结果不确定，则用沸水煮萃取方法进一步确认。（第 8 章）
      B. Plastics & Electronics: The sample is comminuted and digested with alkaline mixtures. Chromium VI content is determined with UV-VIS spectroscopic technique. (Chapter 9)
         塑料和电子器件：先将样品粉碎，然后用混酸消解。六价铬含量由紫外可见分光光度计测定。（第 9 章）
   iv. PBBs and PBDEs: The sample is extracted by appropriate solvent and quantified by GC-MS. (Chapter 7)
      多溴联苯和多溴联苯醚：将样品用合适溶液进行提取，再由气相色谱-质谱联用仪测定。（第 7 章）
3. The testing approach reference to 测试方法参考：
   i. "RoHS Enforcement Guidance Document version 1" by EU RoHS Enforcement Authorities Informal Network (May 2006),
      "RoHS 强制指导文件版本 1" EU RoHS 强制委员会非正式网络（2006，5 月）
   ii. "RoHS Regulations – Government Guidance Notes" by Department of Trade and Industry, UK (Jan 2007), and
      "RoHS 章程 - 政府指导注释" 英国贸易和工业局（2007，1 月），以及
   iii. "RoHS substances (Hg, Pb, Cr(VI), Cd, PBB and PBDE) in electrical and electronic equipment in Belgium" by Belgium Federal Public Service, Health, Food Chain Safety and Environment, Belgium (Nov 2005)
      "比利时关于电子电器类产品 RoHS 受限物质（汞，铅，六价铬，镉，多溴联苯和多溴联苯醚）" 比利时公共服务，健康，食品链和环境安全联盟（2005，11 月）

Remark/ 备注:

1. Total chromium and bromine are determined, positive results are confirmed by wet chemical tests.
   测试总铬和总溴量，如结果有怀疑，用湿化学方法确认。
2. Positive means the presence of hexavalent chromium on the tested areas and it is regarded as in conflict with RoHS requirements. According to the IEC 62321, the principle of this method was evaluated and supported by two studies organized by IEC TC111 WG3. The studies were focused on detecting the presence of Cr(VI) in metallic samples.
   阳性表示测试表面存在六价铬，则被认为与 RoHS 要求有冲突。根据 IEC62321，该测试方法的原理被 IEC TC111 WG3 所组织的两次研究所评估和支持。该研究主要致力于金属样品六价铬 Cr(VI)存在性的检测。
3. RoHS' limits reference to *"COMMISSION DECISION of 18 August 2005 amending Directive 2002/95/EC of the European Parliament and of the Council for the purpose of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment (notified under document number C(2005) 3143) (2005/618/EC)".*
   RoHS 建议最高限值参考*"2005，8 月 18 日欧盟委员会修订的 2002/95/EC 指令关于电子电器类产品中受限物质最高浓度的执行决议（文件号 C(2005) 3143）(2005/618/EC)"*
4. The verification testing applies on the full product as final check or verification. The purpose is to quickly verify the RoHS status of the sample. When detecting failures, it is advised to go back to the technical file and communicate with the suppliers and production for potential problem.
   该验证测试用于最终成品的检查或验证，目的是快速验证样品的 RoHS 状态。当测试结果不合格时，建议就技术文件和供应商沟通，以解决潜在问题。
5. The result relates only to the tested item. The report shall not be reproduced except full without the written approval of the testing laboratory. Parameters which are not covered by the lab´s testing scope are subcontracted to laboratories with government approval. The accreditation relates to competences given in the accreditation certificate.
   测试结果仅代表被测样品。未经实验室书面许可，此报告不可被复制。对于本实验室未能涵盖的测试项目，实验室可以分包给其它政府承认的实验室。分包实验室的能力验证会在验证证书中注明。
6. The XRF results of this assessment may be different to the actual content based on various factors including, but not limit to, sample size, thickness, area, non-uniformity composition, surface flatness.
   基于，但不限于，样品量，厚度，面积，成分的不均匀性，表面平整性等原因，该评估的 XRF 结果可能与浓度有所偏差。
7. The above results of items 1-5, 7-8 are transferred from (5507)208-2058 dated on August 7, 2007.
   测试项目 1-5, 7-8 的结果参考自(5507)208-2058 日期 2007 年 8 月 7 日。

END 结束