

Survey Report

Report No.:RSNB1108091343105001

Page 1 of 26

Client :
Address :

Sample Name :Tire Gauge
Test Model :H627
Sample Received Date :Aug. 09, 2011
Testing Period :Aug. 09, 2011 to Aug. 13, 2011
Specification :According to EU RoHS Directive (2002/95/EC) and the request of client, this report is to survey the contents of Hazardous Substances in Electrical and Electronic Equipment.
Conclusion :Pass

The submitted complete machine is tested with reference to IEC 62321:2008 Ed.1 by “homogeneous material” principle. The test result stated as the following pages is compliant with the requirement of the RoHS Directive of European Commission.

Tested by

Approved by



Technical Manager

Inspected by

Date

Aug. 13, 2011

No. 42376593

CONTENTS

Test Method		3
Test Process		4
Test Results		7
Sample Photo		10
Photos of Test Components		11
Annex （Exemption Items）		

Test Method:

1. As specified by client, to analyze the contents of Lead, Cadmium, Mercury, Chromium, Bromine in the submitted sample by XRF. Screening limits in mg/kg for regulated elements in various matrices according to IEC 62321:2008 Ed.1

Element	Polymers	Metals	Composite Material
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$		$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

Note: BL=Below limit;

X = The region where further investigation is necessary;

OL = Over limit;

3σ= The repeatability of the analyzer at the action level;

LOD= Limit of detection

XRF testing results are only used for reference.

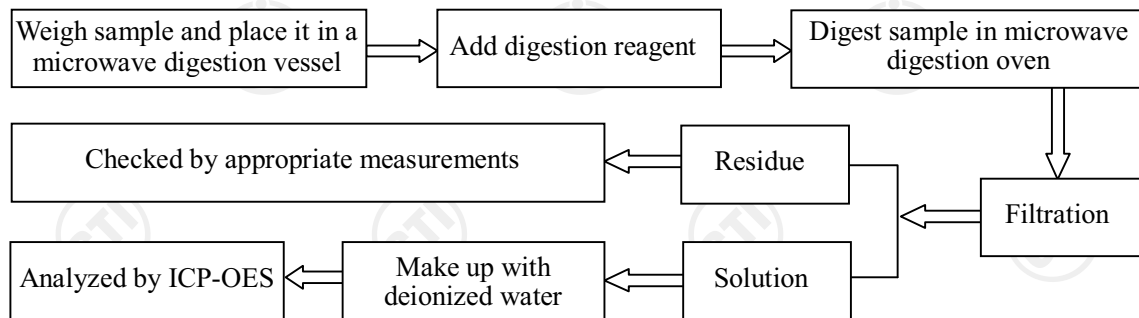
2. If XRF testing result is in the region of X, use chemical test to determine the hazardous substances

Tested Item(s)	Test Method	Measured Equipment(s)	MDL
Lead (Pb) /Cadmium (Cd)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2 mg/kg
	IEC 62321:2008 Ed.1 Sec.9		
	IEC 62321:2008 Ed.1 Sec.10		
Mercury (Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2 mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex B	UV-Vis	/
	IEC 62321:2008 Ed.1 Annex C		2mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
Polybrominated DiphenylEthers (PBDEs)			

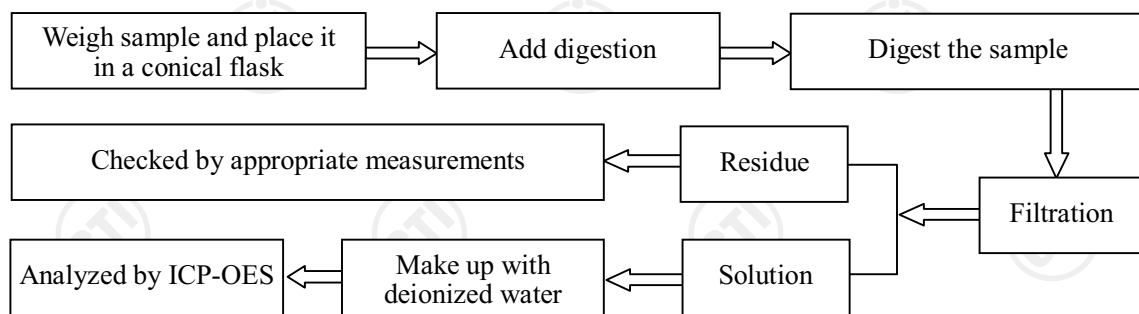
Test Process :

1. Test for Pb/Cd Content

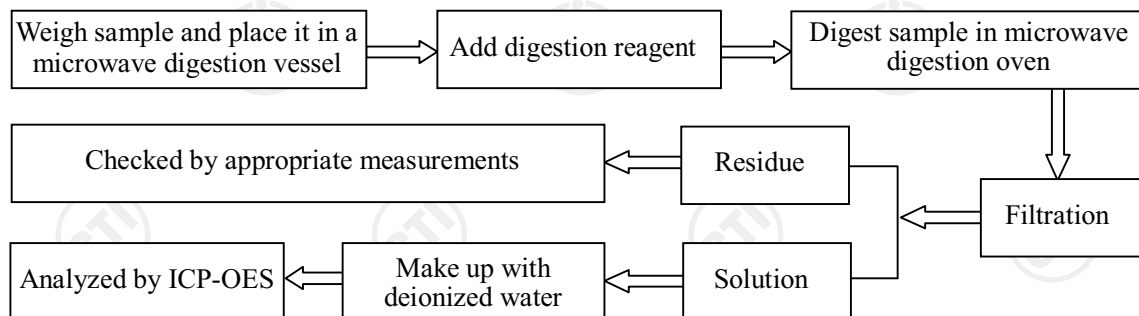
(1)IEC 62321:2008 Ed.1 Sec.8



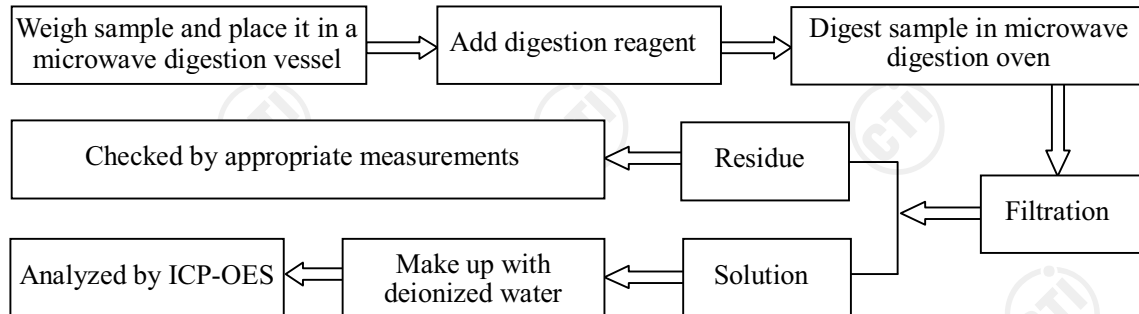
(2)IEC 62321:2008 Ed.1 Sec.9



(3)IEC 62321:2008 Ed.1 Sec.10

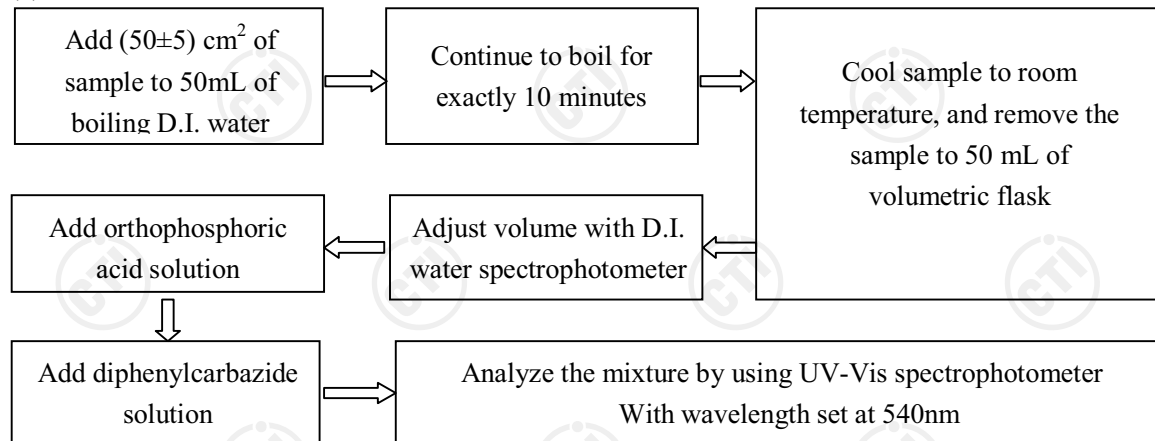


2. Test for Hg Content

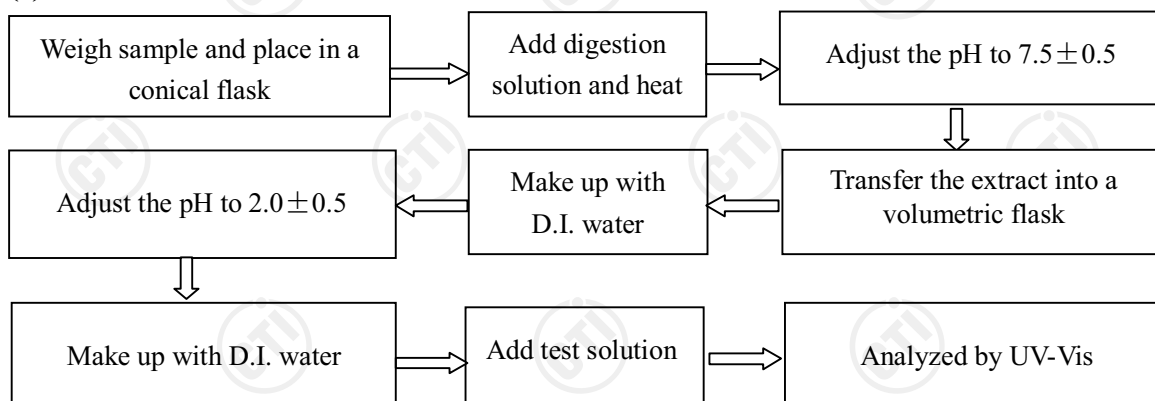


3. Test for Chromium(VI) Content

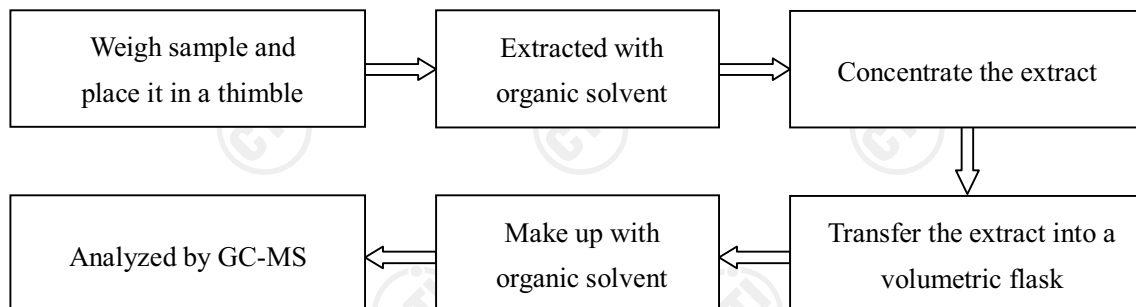
(1) IEC 62321:2008 Ed.1 Annex B



(2) IEC 62321:2008 Ed.1 Annex C



4. Test for PBBs /PBDEs Content



1. XRF Test Result(s)

No.	Test Components Description(s)	Test Item(s) (Unit: mg/kg)				
		Pb	Cd	Hg	Cr	Br
1	Metal with silvery plating	N.D.	N.D.	N.D.	N.D.	N/A
2	Screw nail with silvery plating	N.D.	N.D.	N.D.	4.3×10^2	N/A
3	Screw nail with silvery plating	N.D.	N.D.	N.D.	N.D.	N/A
4	Metal with silvery plating	2.9×10^2	N.D.	N.D.	N.D.	N/A
5	Black plastic	N.D.	N.D.	N.D.	N.D.	N.D.
6	Multicolor label paper	N.D.	N.D.	N.D.	N.D.	N.D.
7	Screw nail with silvery plating	N.D.	N.D.	N.D.	/	N/A
8	Black plastic with silvery plating	N.D.	N.D.	N.D.	N.D.	3.9×10^1
9	Metal with silvery plating	N.D.	N.D.	N.D.	6.3×10^1	N/A
10	Black plastic	N.D.	N.D.	N.D.	N.D.	N.D.
11	Grey rubber	N.D.	2.1×10^1	N.D.	N.D.	N.D.
12	Silvery plastic thin slice with viscosity	N.D.	N.D.	N.D.	1.7×10^1	N.D.
13	Screw nail with silvery plating	N.D.	N.D.	N.D.	/	N/A
14	Pink rubber	N.D.	N.D.	N.D.	N.D.	N.D.
15	LCD	N.D.	N.D.	N.D.	N.D.	N.D.
16	Red wire skin	N.D.	N.D.	N.D.	N.D.	1.1×10^1
17	Copper-colored metal wire	N.D.	N.D.	N.D.	N.D.	N/A
18	Metal with silvery plating	N.D.	N.D.	N.D.	N.D.	N/A
19	Watch Batteries	N/A	N/A	N/A	N/A	N/A
20	PCB	N.D.	N.D.	N.D.	/	/
21	Black foam	2.3×10^1	N.D.	N.D.	N.D.	4.1×10^1
22	Plastic with white coating	N.D.	N.D.	N.D.	N.D.	N.D.
23	Orange plastic	N.D.	N.D.	N.D.	N.D.	N.D.
24	Black plastic	N.D.	N.D.	N.D.	N.D.	N.D.

No.	Test Components Description(s)	Test Item(s) (Unit: mg/kg)				
		Pb	Cd	Hg	Cr	Br
25	Screw nail with silvery plating	N.D.	N.D.	N.D.	N.D.	N/A
26	Black rubber	3.3×10^1	N.D.	N.D.	N.D.	1.0×10^1
27	Black rubber	5.7×10^1	N.D.	N.D.	N.D.	2.6×10^1
28.1	LED1 body	N.D.	N.D.	N.D.	N.D.	/
28.2	Pin	N.D.	N.D.	N.D.	N.D.	N/A
29.1	LED2 body	N.D.	N.D.	N.D.	N.D.	/
29.2	Pin	N.D.	N.D.	N.D.	N.D.	N/A
30.1	Body	2.5×10^1	N.D.	N.D.	N.D.	N.D.
30.2	Pin	6.5×10^1	N.D.	N.D.	N.D.	N/A
31	SMD resistor	N.D.	N.D.	N.D.	N.D.	1.8×10^2
32	Chip capacitors	N.D.	N.D.	N.D.	N.D.	3.0×10^1
33	Transistor	N.D.	N.D.	N.D.	N.D.	/
34	Black solid	N.D.	N.D.	N.D.	N.D.	3.7×10^1
35	PCB	N.D.	N.D.	N.D.	1.5×10^2	/
36	Silvery solder	3.0×10^2	N.D.	N.D.	N.D.	N/A

Note: Testing results are only used for reference.

N.D. = Not Detected (Nonmetal<10mg/kg,Metal<50mg/kg)

N/A = Not Applicable (No need to test samples of standard inspection)

2. Chemistry Test Result(s)

No.	Test Components Description(s)	Test Item(s) (Unit: mg/kg)					
		Pb	Cd	Hg	Cr(VI)	PBBs	PBDEs
7	Screw nail with silvery plating	/	/	/	Negative	/	/
13	Screw nail with silvery	/	/	/	Negative	/	/
19	Watch Batteries	N.D	N.D	N.D	/	/	/
20	PCB	/	/	/	N.D.	N.D.	N.D.
28.1	LED1 body	/	/	/	/	N.D.	N.D.
29.1	LED2 body	/	/	/	/	N.D.	N.D.
33	Transistor	/	/	/	/	N.D.	N.D.
35	PCB	/	/	/	/	N.D.	N.D.
limit	Pb≤1000mg/kg Cd≤100mg/kg Hg≤1000mg/kg Cr(VI)≤1000mg/kg PBBs≤1000mg/kg PBDEs≤1000mg/kg						

Note: The sample had been dissolved totally tested for Lead, Cadmium, Mercury.

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL)

-mg/kg = ppm = parts per million

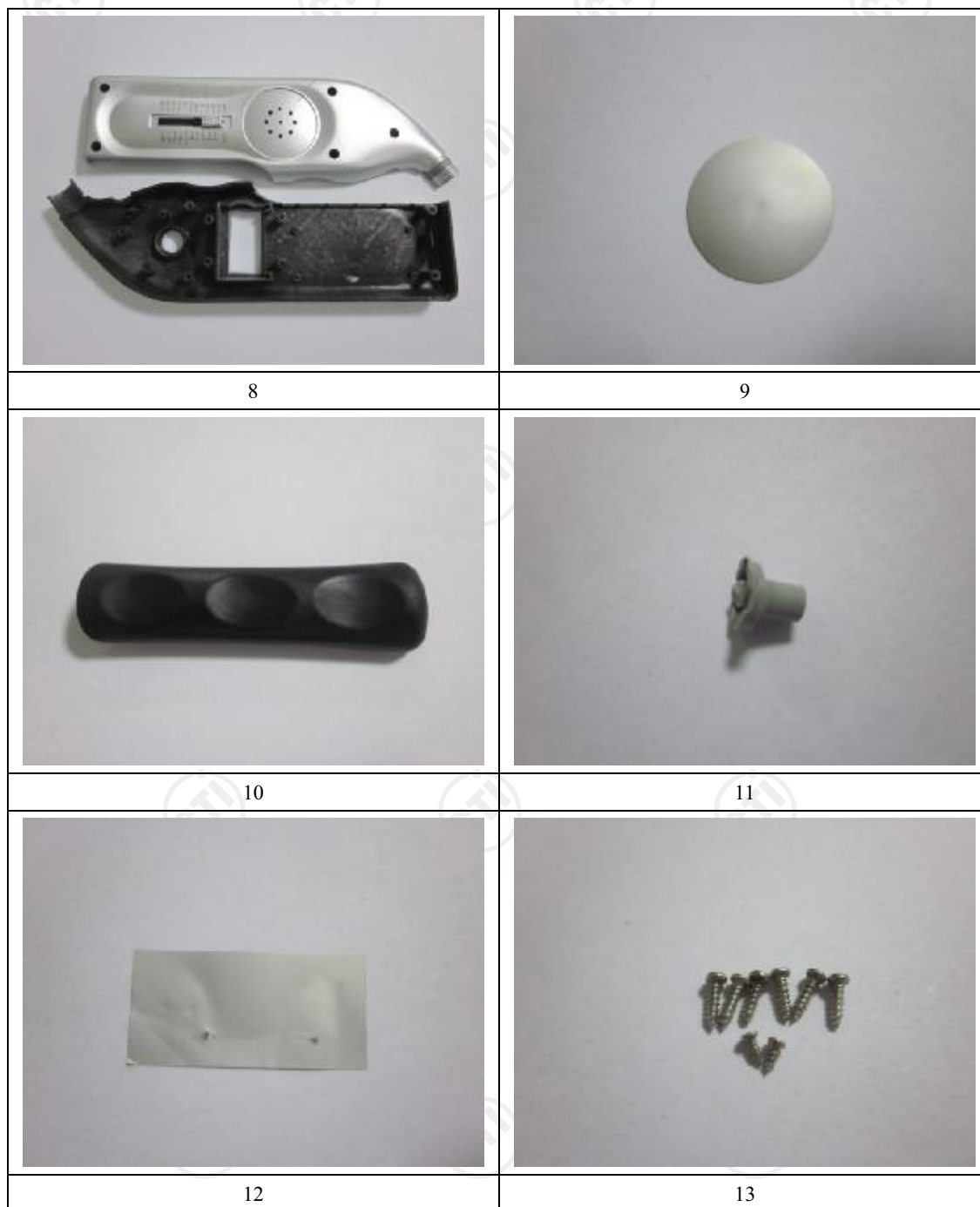
-Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling - water-extraction solution is less than 0.02 mg/kg with 50cm² sample surface area used

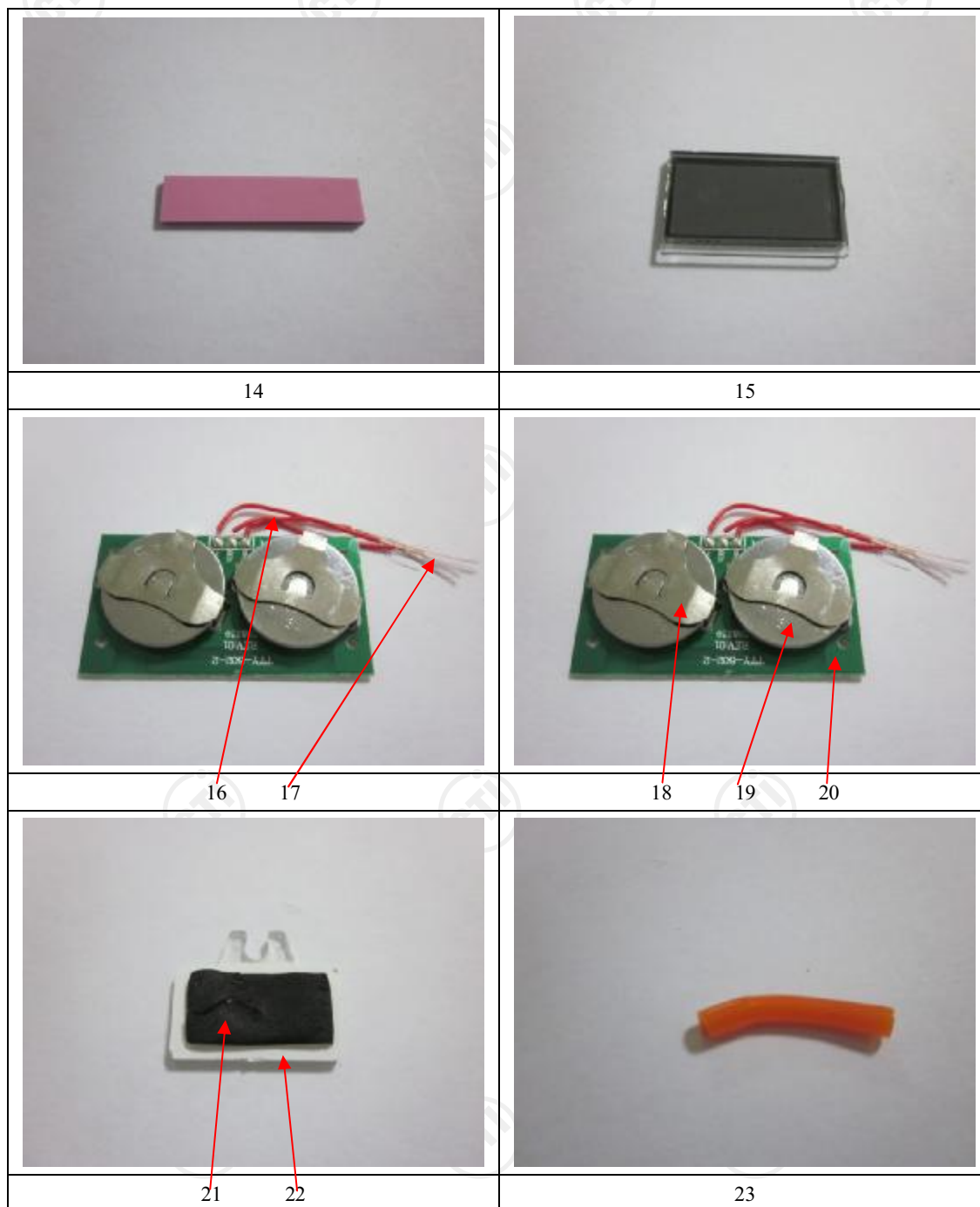
Photo of the sample

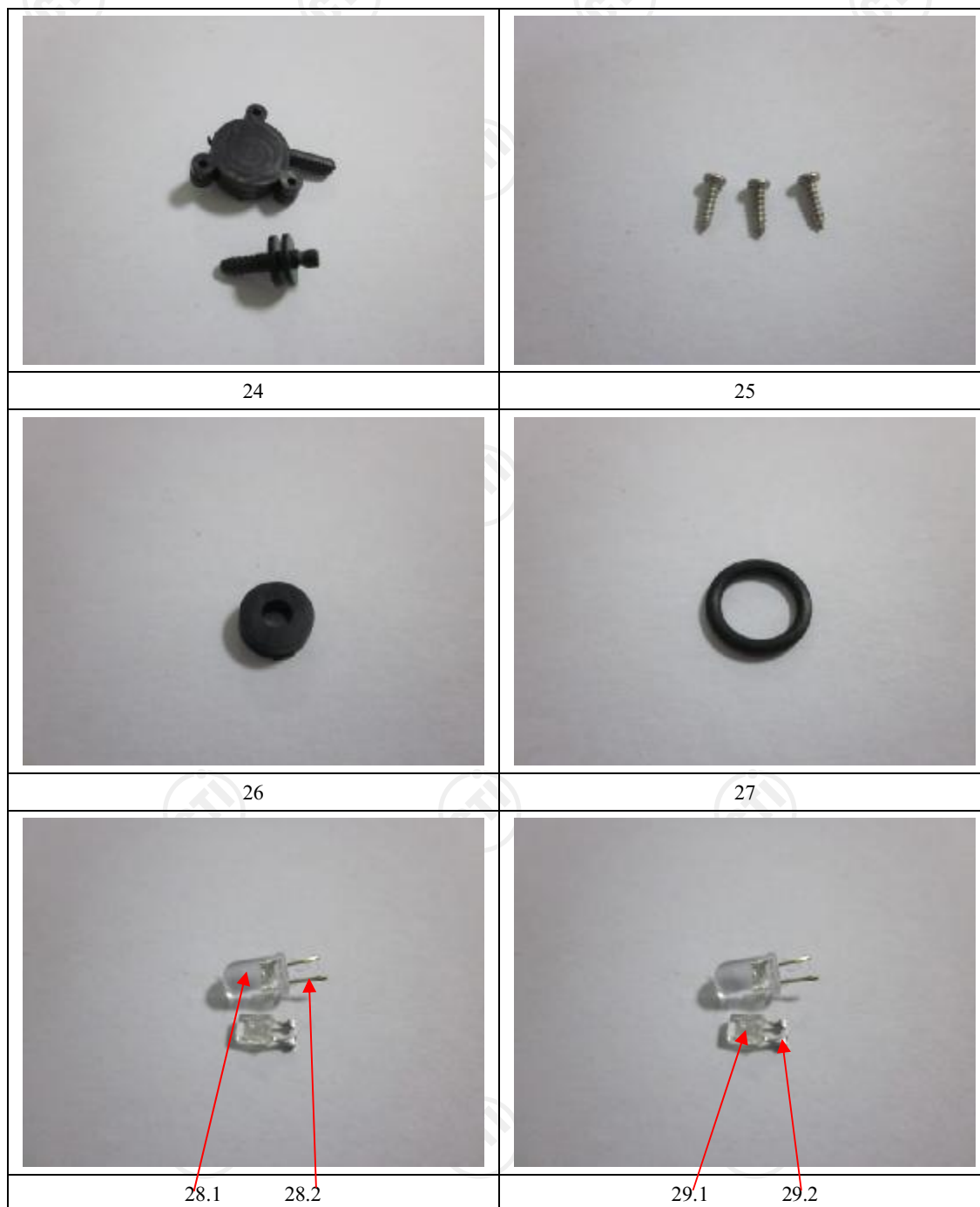


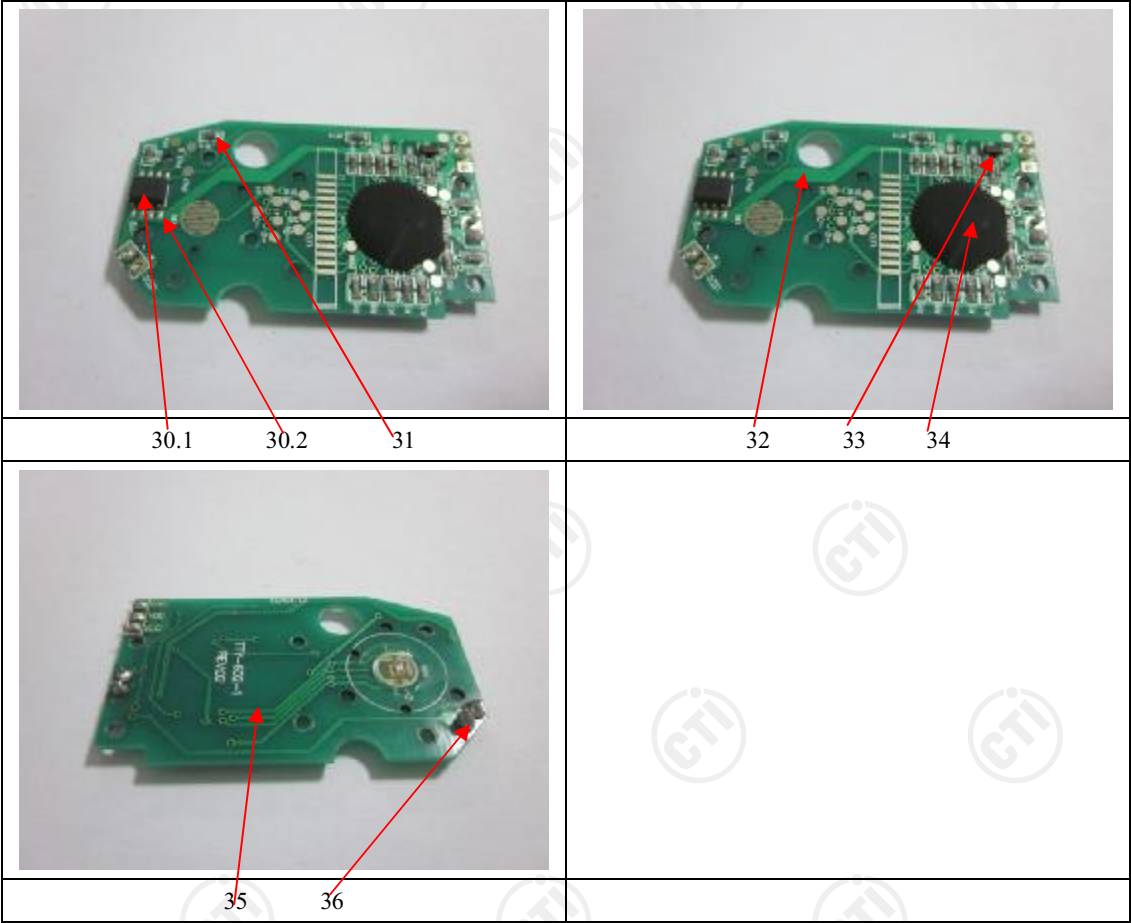
Photos of Test Components











RoHS指令豁免项目

Exempted Items of RoHS Directive

欧盟委员会针对豁免材料陆续发布了9次决议，分别是：2002/95/EC，2005/717/EC，2005/747/EC，2006/310/EC，2006/690/EC，2006/691/EC，2006/692/EC，2008/385/EC和2010/571/EU。这些决议中的豁免共计39项。

The Commission of the European Communities has issued nine commission decisions about the exemptions. They are 2002/95/EC, 2005/717/EC, 2005/747/EC, 2006/310/EC, 2006/690/EC, 2006/691/EC, 2006/692/EC, 2008/385/EC and 2010/571/EU. There are 39 exemption items altogether.

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): 单端（紧凑）荧光灯中的汞含量不得超过（每灯）：	
1(a)	For general lighting purposes < 30 W: 5 mg 一般照明用途，小于30 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 until 31 December 2012; 2,5 mg shall be used per burner after 31 December 2012 2011 年12 月31日到期；2011年12月31日至2012年12 月31日按照3.5mg/灯；2012 年12 月31日之后按照2.5 mg/灯
1(b)	For general lighting purposes ≥ 30 W and < 50 W: 5 mg 一般照明用途，30 W≤功率< 50 W: 5mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 2011年12月31日到期；之后按照3.5 mg/灯
1(c)	For general lighting purposes ≥ 50 W and < 150 W: 5 mg 一般照明用途，50 W≤功率< 150 W: 5mg	
1(d)	For general lighting purposes ≥ 150 W: 15 mg 一般照明用途，功率≥150 W: 15 mg	
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤17 mm 一般照明用途，圆形或者方形结构，且管直径≤17mm	No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011 没有使用限制至2011 年12 月31 日到期；2011 年12 月31 日之后按照7 mg/灯
1(f)	For special purposes: 5 mg 特殊用途：5 mg	

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): 用于一般照明用途的双端线性荧光灯中汞的含量不超过（每灯）：	
2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 5 mg 正常寿命的三基色粉和管直径<9mm（如T2）：5 mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011 2011 年12 月31 日到期；在此之后按照4 mg/灯
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 5 mg 正常寿命的三基色粉和 9mm≤管直径≤17mm（如T5）：5 mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011 2011 年12 月31 日到期； 在此之后按照3 mg/灯
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 5 mg 正常寿命的三基色粉和17mm<管直径≤28mm（如T8）：5 mg	Expires on 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011 2011 年12 月31 日到期；在此之后按照3.5 mg/灯
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg 正常寿命的三基色粉和管直径>28mm（如T12）：5 mg	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012 2012 年12 月31 日到期；在此之后按照3.5 mg/灯
2(a)(5)	Tri-band phosphor with long lifetime (≥ 25 000 h): 8 mg 长寿命（≥25000 小时）的三基色粉：8 mg	Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011 2011 年12 月31 日到期；在此之后按照5 mg/灯
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp): 其他荧光灯中汞含量不超过：（每灯）	
2(b)(1)	Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg 管直径>28mm的线性卤磷酸盐灯（如T10和T12）：10 mg	Expires on 13 April 2012 2012 年4 月13 日到期
2(b)(2)	Non-linear halophosphate lamps (all diameters): 15 mg 非线性卤磷酸盐灯（所有直径）：15mg	Expires on 13 April 2016 2016 年4 月13 日到期
2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9) 管直径>17mm的非线性三基色粉灯（如T9）	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照15 mg/灯
2(b)(4)	Lamps for other general lighting and special	No limitation of use until 31 December

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
	purposes (e.g. induction lamps) 其他一般照明和特殊用途的灯（如感应灯）	2011; 15 mg may be used per lamp after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照15 mg/灯
3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp): 特殊用途的冷阴极荧光灯和外部电极荧光灯中汞的含量不超过（每灯）：	
3(a)	Short length (≤ 500 mm) 短尺（ ≤ 500 mm）	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照3.5 mg/灯
3(b)	Medium length (> 500 mm and $\leq 1\,500$ mm) 中等尺（ > 500 mm 且 ≤ 1500 mm）	No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照5 mg/灯
3(c)	Long length (> 1500 mm) 长尺（大于1500mm）	No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照13 mg/灯
4(a)	Mercury in other low pressure discharge lamps (per lamp) 其他低压放电灯中汞的含量（每灯）	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照15 mg/灯
4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index $R_a > 60$: 一般照明用途的高压钠（蒸汽）灯，改进显色指数 $R_a > 60$ ，其中汞含量不超过：	
4(b)-I	$P \leq 155$ W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照30 mg/灯
4(b)-II	$155\text{ W} < P \leq 405\text{ W}$	No limitation of use until 31 December 2011; 40 mg may be used per burner after

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
		31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照40 mg/灯
4(b)-III	$P > 405 \text{ W}$	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照40 mg/灯
4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): 一般照明用途的其他高压钠（蒸汽）灯中的汞含量不超过（每灯）：	
4(c)-I	$P \leq 155 \text{ W}$	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照25 mg/灯
4(c)-II	$155 \text{ W} < P \leq 405 \text{ W}$	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011 没有使用限制至2011 年12 月31 日到期；在此之后按照30 mg/灯
4(c)-III	$P > 405 \text{ W}$	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011 没有使用限制至2011 年12 月31日到期；在此之后按照40 mg/灯
4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV) 高压汞（蒸汽）灯中汞的含量	Expires on 13 April 2015 2015年4月13日到期
4(e)	Mercury in metal halide lamps (MH) 金属卤化灯中汞的含量	
4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex 未在此附录中特别提及的用于特殊用途的其他放电灯中汞的含量	
5(a)	Lead in glass of cathode ray tubes 阴极射线管的玻璃内的铅含量	
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight 荧光管的玻璃内的铅含量不超过其重量的	

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
	0.2%	
6(a)	Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0,35 % lead by weight 加工用途的钢和镀锌钢中合金元素中的铅的重量比不超过 0.35%	
6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight 铝里，铅的重量比不超过 0.4%	
6(c)	Copper alloy containing up to 4% lead by weight 铜合金中，铅的重量比不超过 4%	
7(a)	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead); 高温融化焊料中的铅（如：铅含量大于或等于85%的铅基合金）；	
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications; 用于服务器，存储器和存储阵列系统焊料中的铅，用于交换，信号产生和传输，以及电信网络管理的网络基础设施设备中焊料中的铅；	
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound; 电气及电子元件中玻璃或陶瓷里的铅。电容器的介电陶瓷中的铅除外，如压电陶瓷装置，或在玻璃或陶瓷基混合物内。	
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher; 额定电压125V AC 或者250V DC 或更高的电容器的介电陶瓷中的铅；	
7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC.	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
	额定电压小于125V AC 或者250V DC的电容器的介电陶瓷中的铅。	电子电气设备的备用部件在2013年1月1日之前可投放市场
8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs; 热熔断体中的镉及镉化合物;	Expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012 电子电气设备的备用部件在2012年1月1日之前可投放市场。
8(b)	Cadmium and its compounds in electrical contacts. 电气触点中的镉及镉化合物。	
9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution; 在吸收式电冰箱中作为碳钢冷却系统的防腐剂的六价铬的重量比不超过0.75%;	
9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications; 包含用于供暖、空气流通、空调和制冷设备的压缩机的制冷剂的轴承外壳与衬套中的铅	
11(a)	Lead used in C-press compliant pin connector systems; C-press顺应针联接系统中使用的铅	May be used in spare parts for EEE placed on the market before 24 September 2010 电子电气设备的备用部件在2010年9月24日前可投放市场
11(b)	Lead used in other than C-press compliant pin connector systems. 除C-press 以外顺应针联接系统中使用的铅。	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013 电子电气设备的备用部件在 2013 年 1 月 1 日之前可投放市场
12	Lead as a coating material for the thermal conduction module C-ring. 用于热传导模块C-环的覆盖材料中的铅	May be used in spare parts for EEE placed on the market before 24 September 2010 电子电气设备的备用部件在 2010 年 9 月 24 日前可投放市场
13(a)	Lead in white glasses used for optical applications; 在光学应用中白色玻璃内使用的铅	
13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
	在滤光玻璃和反射镜中所用的铅和镉	
14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight. 微处理器引脚及封装联接所使用的含两种以上组分的焊料中的铅（铅含量在80%与85%之间）。	Expires on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011 电子电气设备的备用部件在2011年1月1日前可投放市场
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages. 集成电路倒装芯片封装中半导体芯片及载体之间形成可靠联接所用焊料中的铅。	
16	Lead in linear incandescent lamps with silicate coated tubes. 带有硅酸盐灯管的线型白炽灯中的铅。	Expires on 1 September 2013 2013 年 9 月 1 日到期
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications. 用于专业复印设备的高强度放电灯(HID)中用作激发的卤素铅。	
18(a)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba) ₂ MgSi ₂ O ₇ :Pb); 当放电灯被用作重氮复印、平版印刷、捕虫器、光化学和固化工艺的特种灯，含有磷光粉时，比如SMS ((Sr,Ba) ₂ MgSi ₂ O ₇ :Pb)，放电灯中的荧光粉触媒剂的铅含量在其重量的1%或以下；	Expires on 1 January 2011 2011 年 1 月 1 日到期
18(b)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi ₂ O ₅ :Pb). 当放电灯被用作含磷光粉的仿日晒灯，比如含有BSP (BaSi ₂ O ₅ :Pb)，放电灯中的荧光粉触媒剂的铅含量在其重量的1%或以下。	

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL). 紧凑型节能灯(ESL)中作为主要汞合金的特定的PbBiSn-Hg 和PbInSn-Hg中的铅, 以及作为辅助汞合金的PbSn-Hg中的铅。	Expires on 1 June 2011 2011 年 6 月 1 日到期
20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs). 液晶显示器(LCD)用于连接平面荧光灯前后基片用的玻璃中的氧化铅。	
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses. 用在玻璃表面瓷釉, 如硅酸盐玻璃和碱石灰玻璃上的印刷油墨中的铅和镉。	
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0, 65 mm and less. 小螺距零部件表面处理中的铅(螺距不超过0.65mm的连接器的不在豁免之内)。	May be used in spare parts for EEE placed on the market before 24 September 2010 电子电气设备的备用部件在2010年9月24日前可投放市场
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors. 通孔盘状及平面阵列陶瓷多层电容器焊料所含的铅	
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring. 表面传导式电子发射显示器(SED)构件中所用的氧化铅, 特别是封装玻璃和环状玻璃中的氧化铅。	
26	Lead oxide in the glass envelope of black light blue lamps. 黑光灯(BLB)玻璃封装中的氧化铅;	Expires on 1 June 2011 2011 年 6 月 1 日到期
27	Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers. 用作大功率扬声器(用在长时间操作125分贝以上的音响系统)的换能器中焊料的铅合金。	Expired on 24 September 2010 2010 年 9 月 24 日到期

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC ⁽¹⁾ . 理事会指令69/493/EEC 附件I（第1、2、3和4类）中定义的水晶玻璃中的铅。	
30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more. 电导体直接与音压大于或等于100分贝大功率扬声器的换能器上音圈进行电气或机械焊接时，所用焊料中的镉合金	
31	Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting) 无汞平板荧光灯内焊接材料中的铅（例如用于液晶显示器、设计或工业用照明）	
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes 窗体装配中，用于氩和氪激光管的密封玻璃中的氧化铅	
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers 用来焊接电源变压器中直径不大于100微米的细铜线的焊料中的铅	
34	Lead in cermet-based trimmer potentiometer elements 金属陶瓷质的微调电位器元件中的铅	
36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display 直流等离子显示器中，作为阴极溅射抑制剂中的汞在每个显示器中的含量不得超过30 mg	Expired on 1 July 2010 2010 年7 月1 日期
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body 以硼酸锌玻璃体为基材的高压二极管的电镀层的铅	

No. 序号	Exemption 豁免	Scope and dates of applicability 范围和应用日期
38	Cadmium and cadmium oxide in thick film pastes used on aluminum bonded beryllium oxide 用在铝键合氧化铍上的厚膜浆料中的镉和氧化镉	
39	Cadmium in color converting II-VI LEDs (< 10 µg Cd per mm ² of light-emitting area) for use in solid state illumination or display systems 用于固态照明或显示使用系统中的彩色转换II - VI 族发光二极管(每平方毫米发光区域内Cd<10µg)内所含的镉	Expires on 1 July 2014 2014 年7 月1 日到期

(¹) OJ L 326, 29.12.1969, p. 36

注释:

1. 依照欧盟决议 2006/692/EC, 第 28 条豁免项目将在 2007 年 7 月 1 日中止。原第 28 条项目为: 用于防腐或屏蔽电磁干扰, 用在特定仪器设备中(欧盟指令 2002/96/EC 第三类规定的 IT 和通讯设备)的金属片或金属扣件上的防腐涂层中的六价铬。
According to the commission decision 2006/692/EC of the European communities, the 28th exemption item of Directive 2002/95/EC had been terminated. The 28th exemption item of Directive 2002/96/EC said: "Hexavalent chromium in corrosion preventive coatings of unpainted metal sheeting and fasteners used for corrosion protection and Electromagnetic Interference shielding in equipment falling under category three of Directive 2002/96/EC.Exemption granted until 1 July 2007".
2. 2008 年 4 月 1 日, 欧洲法院(European Court of Justice)发布公告: 欧盟委员会 2005 年公布的针对十溴二苯醚的豁免项目存在程序性的错误, 因此废除委员会决议 2005/717/EC 对聚合物中十溴二苯醚的豁免。
The exemption of Deca-BDE in polymetric application according 2005/717/EC was overruled by the European Court of Justice by it decision of 01.04.2008.
3. 根据欧盟对 RoHS 指令的新决定 No.2005/428/EC, 本条豁免项将在 2009 年 12 月 31 日被删除(原 22 条)
According to the decision No.2005/428/EC of Directive 2002/95/EC, this item will be deleted on Dec. 31, 2009 (The 22th exemption item)
4. 2009 年 6 月 11 日, 欧盟发布了 RoHS 指令豁免条款的修订决议, 决议编号 2009/443/EC。此次修订是在 RoHS 指令原有的 32 项豁免的基础上新增了 6 项有关于铅, 汞, 镉的豁免, 详见 33, 34, 35, 36, 37, 38 条。
The European Commission has published a decision adapting to technical progress the Annex to the RoHS Directive on June 11, 2009. The decision Number is 2009/443/EC.Applications exempted from the RoHS Directive were 32 points before. Now six exemptions will be added to RoHS Directive on lead, mercury, cadmium, See items of 33, 34, 35, 36, 37, 38.
5. 以上豁免项目, 若中文译文与英文原文意思上不一致, 以英文原文为准。
The above exemptions item, if the Chinese translation is inconsistent with the English meaning of the original text, the English original shall prevail.

*** End of report ***

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