



# **Test Report**

No. ED110408002C

SHENZHEN JOYE TECHNOLOGY CO., LTD. 4/F, 9<sup>TH</sup> BLVD. CHANGXING HIGH NEW TECH. INDUSTRY ZONE, SHAJING, BAOAN, SHENZHEN, CHINA

(The Submitted Sample Said To Be)

Item Name : JOYETECH 510-T

Style/Item No. : 510-T
Destination : Europe

Sample Received Date : April 08, 2011
Testing Completed Date : April 20, 2011

Test Requested : As requested by client, to evaluate the compliance of the submitted sample with the

Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the Restriction of the use of certain Hazardous Substances in electrical and electronic

equipment and its amended directives.

Test Method : 1. Review was performed for the sample and the related Bill of Material submitted by the

Applicant.

2. To refer to the standard IEC 62321:2008 Ed.1

a) Screening by XRF Spectroscopy.

b) Wet chemical test

) Determination of Lead, Cadmium and Mercury by ICP-OES / AAS.

NEMTA

ii) Determination of Hexavalent Chromium by UV-VIS.

iii) Determination of PBBs and PBDEs by GC/MS.

Test Results : Please refer to next page (s).

**Executive Summary:** 

STANDARD CONCLUSION

Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment and its amended directives.

PASS

Signed for and on behalf of Dong Guan EMTEK Co., Ltd .

Manager April 20, 2011





### **TEST RESULTS:**

### 1) Test results of XRF screening

NI-		O-mala D-saviat				RESULTS		
No.		Sample Descript	lion	Pb	Cd	Hg	Cr	Br
1-1-1			Silver metal w/black coating	BL	BL	BL	Х	NA
1-1-2			Cigarette holder- white soft plastic	BL	BL	BL	BL	BL
1-1-3		Shell	Cigarette holder- white hard plastic	BL	BL	BL	BL	BL
1-1-4			Grey plastic cover	BL	BL	BL	BL	BL
1-2-1			Copper metal	OL	BL	BL	BL	NA
1-2-2			Copper metal(center)	OL	BL	BL	BL	NA
1-2-3			Hoar plastic	BL	BL	BL	BL	BL
1-2-4			Tape-green plastic	BL	BL	BL	BL	BL
1-2-5			Tape-orange plastic	BL	BL	BL	BL	BL
1-2-6			Tape-yellow plastic	BL	BL	BL	BL	BL
1-2-7	Electronic		Transparent plastic	BL	BL	BL	BL	BL
1-2-8	cigarette		Translucent plastic	BL	BL	BL	BL	BL
1-2-9			Silver metal sheet	BL	BL	BL	Х	NA
1-2-10		Cigarette butts inside	Microphone- black foam	BL	BL	BL	BL	BL
1-2-11			Microphone- shell-silver metal	BL	BL	BL	BL	NA
1-2-12			Microphone- translucent plastic	BL	BL	BL	BL	BL
1-2-13			Microphone- silver plastic film	BL	BL	BL	BL	BL
1-2-14			Microphone- silver metal sheet	BL	BL	BL	BL	NA
1-2-15			Microphone- silver metal ring	BL	BL	BL	BL	NA
1-2-16			Microphone- purple plastic	BL	BL	BL	BL	BL
1-2-17			Microphone- copper metal ring	BL	BL	BL	BL	NA





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No.		Sample Descrip	tion			RESULTS		
140.				Pb	Cd	Hg	Cr	Br
1-2-18			Microphone-red board	BL	BL	BL	BL	Х
1-2-19			Microphone-chip capacitor	BL	BL	BL	BL	BL
1-2-20			Microphone-LED	BL	BL	BL	BL	BL
1-2-21		Cigarette butts	Microphone-chip IC	BL	BL	BL	BL	Х
1-2-22		inside	Microphone- solder-silver metal	BL	BL	BL	BL	NA
1-2-23			Line skin-yellow plastic	BL	BL	BL	BL	BL
1-2-24			Line skin-black plastic	BL	BL	BL	BL	BL
1-2-25			Core-silver metal	BL	BL	BL	BL	NA
1-3-1			Copper metal	OL	BL	BL	BL	NA
1-3-2			Copper metal(center)	OL	BL	BL	BL	NA
1-3-3	Electronic		Solder-silver metal	BL	BL	BL	BL	NA
1-3-4	cigarette		Hoar plastic	BL	BL	BL	BL	BL
1-3-5			Translucent plastic	BL	BL	BL	BL	BL
1-3-6			Silver grey metal net	BL	BL	BL	BL	NA
1-3-7		Internal	Silver metal sheet	OL	BL	BL	BL	NA
1-3-8		Internal cigarette	Silver metal ring	BL	BL	BL	Х	NA
1-3-9		holder	Transparent liquid	BL	BL	BL	BL	BL
1-3-10			White ceramic	BL	BL	BL	BL	NA
1-3-11			Translucent fiber	BL	BL	BL	BL	BL
1-3-12			Spring-silver metal w/black coating	BL	BL	BL	BL	NA
1-3-13			Line skin-red plastic	BL	BL	BL	BL	BL
1-3-14			Line skin-black plastic	BL	BL	BL	BL	BL
1-3-15			Core-silver metal	BL	BL	BL	BL	NA
2-1		Shell	Black plastic	BL	BL	BL	BL	Х
2-2	Charger	Pin	Silver metal	BL	BL	BL	BL	NA
2-3		Label	Silver plastic w/black printing	BL	BL	BL	BL	BL





				No. ED110408002 RESULTS					
No.		Sample Descrip	tion	Pb	Cd	Hg	Cr	Br	
2-4		Foam pad	Black foam	BL	BL	BL	BL	BL	
2-5		Light yellow boa	rd w/green coating	BL	BL	BL	BL	Х	
2-6		Hot melt adhesive	Light yellow solid	BL	BL	BL	BL	BL	
2-7-1			Silver metal	BL	BL	BL	BL	NA	
2-7-2		USB Seat	White plastic	BL	BL	BL	BL	Х	
2-7-3			Copper+silver metal	BL	BL	BL	BL	NA	
2-8			apacitor w/grey nting	BL	BL	BL	BL	BL	
2-9		Electrolytic ca	pacitor w/golden nting	BL	BL	BL	BL	BL	
2-10		·	iode	BL	BL	BL	BL	Х	
2-11		Red	d LED	BL	BL	BL	BL	Х	
2-12		Y Capacitor		BL	BL	BL	BL	BL	
2-13		Blue ceran	nic capacitors	BL	BL	BL	BL	BL	
2-14-1			Light yellow plastic w/adhesive	BL	BL	BL	BL	BL	
2-14-2	Charger		Yellow plastic w/adhesive	BL	BL	BL	BL	BL	
2-14-3		Transformer	Dark grey solid	BL	BL	BL	BL	NA	
2-14-4			Black solid	BL	BL	BL	BL	NA	
2-14-5			Yellow plastic	BL	BL	BL	BL	BL	
2-14-6			Copper tinsel	BL	BL	BL	BL	NA	
2-15		Αι	ıdion	BL	BL	BL	BL	X	
2-16			ng inductor	BL	BL	BL	BL	BL	
2-17		Color ring resistor set	Black plastic	BL	BL	BL	BL	BL	
2-18		Color rii	ng resistor	BL	BL	BL	BL	BL	
2-19		Ch	nip IC	BL	BL	BL	BL	BL	
2-20		Chip	resistor	BL	BL	BL	BL	BL	
2-21		Chip o	capacitor	BL	BL	BL	BL	BL	
2-22		Pin	Silver metal	BL	BL	BL	BL	NA	
2-23		Solder	Silver metal	BL	BL	BL	BL	NA	
2-24-1		Line skin	Red plastic	BL	BL	BL	BL	BL	
2-24-2		LIIIO SIMII	Black plastic	BL	BL	BL	BL	BL	

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No	No. Sample Description				RESULTS			
INO.		Sample Descript	.1011	Pb	Cd	Hg	Cr	Br
2-25		Core	Silver metal	BL	BL	BL	BL	NA
2-26	Charger	Screw	Silver metal w/black coating	BL	BL	BL	BL	NA
3-1-1			Silver metal	BL	BL	BL	BL	NA
3-1-2			Black plastic	BL	BL	BL	BL	BL
3-1-3		USB Plug	White plastic	BL	BL	BL	BL	BL
3-1-4			Copper+silver metal	BL	BL	BL	BL	NA
3-2-1			Black plastic	BL	BL	BL	BL	Х
3-2-2		5.	Hoar plastic	BL	BL	BL	BL	BL
3-2-3	LICD Cable	Plug	Silver metal	OL	BL	BL	BL	NA
3-2-4	USB Cable		Silver metal(center)	OL	BL	BL	BL	NA
3-3		Color rir	ng resistor	BL	BL	BL	BL	BL
3-4-1			Black plastic	BL	BL	BL	BL	BL
3-4-2		Line skin	White plastic	BL	BL	BL	BL	BL
3-4-3			Red plastic	BL	BL	BL	BL	BL
3-5		Core	Copper metal	BL	BL	BL	BL	NA
3-6		Set of fixed line	Black plastic	BL	BL	BL	BL	BL

Note:

OL = Over Limit by XRF analysis
 X = Inconclusive (need further wet chemical testing)

BL = Below Limit by XRF analysis

NA = Not Applicable







Remark: 1) Results are obtained by XRF for primary screening, and further wet chemical testing by ICP-OES / AAS (for Cd, Pb, Hg), UV-VIS (for Cr(VI)) and GC/MS (for PBBs, PBDEs) is recommended to be performed, if an inconclusive result was found (as "X" in below table)(unit: mg/kg).

Element	Polymer	Metal	Composite Materials
Cd	BL $\leq$ (70-3 $\sigma$ )< X < (130+3 $\sigma$ ) $\leq$ OL	BL ≤(70-3 \( \sigma \) ) < X <(130+3 \( \sigma \) ) ≤ OL	LOD < X <(150+3 σ )≤ OL
Dh	BL ≤(700-3 <i>σ</i> )< X <(1300+3 <i>σ</i> )	BL ≤(700-3 σ )< X <(1300+3 σ )	BL ≤(500-3 <i>σ</i> )< X <(1500+3
Pb	≤ OL	≤ OL	<i>σ</i> )≤ OL
Цα	BL ≤(700-3 <i>σ</i> )< X <(1300+3 <i>σ</i> )	BL ≤(700-3 σ )< X <(1300+3 σ )	BL ≤(500-3 <i>σ</i> )< X <(1500+3
Hg	≤ OL	≤ OL	<i>σ</i> )≤ OL
Br	BL $\leq$ (300-3 $\sigma$ )< X	NA	BL ≤ (250-3 <i>σ</i> )< X
Cr	BL ≤ (700-3 <i>σ</i> )< X	BL ≤ (700-3 <i>σ</i> )< X	BL ≤ (500-3 <i>σ</i> )< X

OL = Over Limit, BL = Below Limit, X = Inconclusive, LOD = Limit of Detection, NA = Not Applicable

2) The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition





# 2) Test results of wet chemical analysis

ANALYTE		Result(	ppm)		Detection	Law Limit
ANALTIE	1-2-1 <sup>[4]</sup>	1-2-2 <sup>[4]</sup>	1-3-1 <sup>[4]</sup>	1-3-2 <sup>[4]</sup>	Limit	Law Lillii
Lead (Pb)	32222	25000	34692	26346	2 ppm	1000 ppm

ANALYTE		Result(ppm)		Detection	Law Limit
ANALTIE	1-3-7 <sup>[4]</sup>	3-2-3 <sup>[4]</sup>	3-2-4 <sup>[4]</sup>	Limit	Law Lillii
Lead (Pb)	23800	26418	24520	2 ppm	1000 ppm

ANALYTE		Result(ppm)		Detection Limit	Law Limit
ANALTIE	1-1-1	1-2-9	1-3-8	Detection Limit	Law Lillii
Hexavalent Chromium (Cr 6+)	Negative	Negative	Negative	See note 3	Negative

ANIALVE		F	Result(ppn	າ)		Detection	I avv I inait
ANALYTE	1-2-18	1-2-21	2-1	2-5	2-7-2	Limit	Law Limit
Polybrominated Biphenyls (Mono – Deca) (PBBs)	<50	<50	<50	<50	<50	-1	1000 ppm
Monobromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Dibromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Tribromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Tetrabromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Pentabromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Hexabromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Heptabromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Octabromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Nonabromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Decabromobiphenyl	ND	ND	ND	ND	ND	5 ppm	
Polybrominated Diphenylethers (Mono – Deca) (PBDEs)	<50	<50	<124	<50	<50		1000 ppm
Monobromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Dibromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Tribromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Tetrabromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Pentabromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Hexabromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Heptabromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Octabromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Nonabromodiphenyl ether	ND	ND	ND	ND	ND	5 ppm	
Decabromodiphenyl ether	ND	ND	79	ND	ND	5 ppm	



TESTING CNAS L3150

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ANALYTE		Resul	t(ppm)		Detection	Law Limit
ANALTIE	2-10	2-11	2-15	3-2-1	Limit	Law Limit
Polybrominated Biphenyls (Mono – Deca) (PBBs)	<50	<50	<50	<50		1000 ppm
Monobromobiphenyl	ND	ND	ND	ND	5 ppm	
Dibromobiphenyl	ND	ND	ND	ND	5 ppm	
Tribromobiphenyl	ND	ND	ND	ND	5 ppm	
Tetrabromobiphenyl	ND	ND	ND	ND	5 ppm	
Pentabromobiphenyl	ND	ND	ND	ND	5 ppm	
Hexabromobiphenyl	ND	ND	ND	ND	5 ppm	
Heptabromobiphenyl	ND	ND	ND	ND	5 ppm	
Octabromobiphenyl	ND	ND	ND	ND	5 ppm	
Nonabromobiphenyl	ND	ND	ND	ND	5 ppm	
Decabromobiphenyl	ND	ND	ND	ND	5 ppm	
Polybrominated Diphenylethers (Mono – Deca) (PBDEs)	<50	<50	<50	<50		1000 ppm
Monobromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Dibromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Tribromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Tetrabromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Pentabromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Hexabromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Heptabromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Octabromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Nonabromodiphenyl ether	ND	ND	ND	ND	5 ppm	
Decabromodiphenyl ether	ND	ND	ND	ND	5 ppm	

Note

- : 1. ppm = part per million = mg/kg
  - 2. ND = Not Detected (Less than detection limit value.)
  - 3. Negative = absence of Cr(VI) in the metallic sample
    Positive = presence of Cr(VI) in the metallic sample
    (The tested sample should further verified by boiling-water-extraction method if the spot test result cannot be confirmed or spot test result is negative)
  - 4. According to the product specification provided by client, the specimens are copper alloy containing up to 4% lead by weight which is exempted by RoHS regulation (refer to Annex clause 6(c)).





# Photo Appendix



\* \* \* \* \* \* The End \* \* \* \* \* \*





### **ANNEX**

### **EXEMPTION LIST**

- Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):
- 1(a) For general lighting purposes < 30W: 5mg (expires on 31 December 2011; 3.5mg may be used per burner after 31 December 2011 until 31 December 2012; 2.5mg shall be used per burner after 31 December 2012)
- 1(b) For general lighting purposes ≥ 30W and <50W: 5mg (expires on 31 December 2011; 3.5mg may be used per burner after 31 December 2011)
- 1(c) For general lighting purposes ≥ 50W and <150W: 5mg
- 1(d) For general lighting purposes ≥ 150W: 15mg
- 1(e) For general lighting purposes with circular or square structural shape and tube diameter ≤17mm (no limitation of use until 31 December 2011; 7mg may be used per burner after 31 December 2011)
- 1(f) For special purposes: 5mg
- 2(a) Mercury in double-capped linear fluorescent lamps for general lighting purples not exceeding (per lamp):
- 2(a)(1) Tri-band phosphor with normal lifetime and a tube diameter < 9mm (e.g. T2): 5mg (expires on 31 December 2011; 4mg may be used per lamp after 31 December 2011)
- 2(a)(2) Tri-band phosphor with normal lifetime and a tube diameter ≥ 9mm and ≤ 17mm (e.g. T5): 5mg (expires on 31 December 2011; 3mg may be used per lamp after 31 December 2011)
- 2(a)(3) Tri-band phosphor with normal lifetime and a tube diameter > 17mm and ≤ 28mm (e.g. T8): 5mg (expires on 31 December 2011; 3.5mg may be used per lamp after 31 December 2011)
- 2(a)(4) Tri-band phosphor with normal lifetime and a tube diameter > 28mm (e.g. T12): 5mg (expires on 31 December 2012; 3.5mg may be used per lamp after 31 December 2012)
- 2(a)(5) Tri-band phosphor with long lifetime (≥ 25000h): 8mg (expires on 31 December 2011; 5mg may be used per lamp after 31 December 2011)
- 2(b) Mercury in other fluorescent lamps not exceeding (per lamp):
- 2(b)(1) Linear halophosphate lamps with tube > 28mm (e.g. T10 and T12): 10mg (expires on 13 April 2012)
- 2(b)(2) Non-linear halophosphate lamps (all diameters): 15mg (expires on 13 April 2016)
- 2(b)(3) Non-linear tri-band phosphor lamps with tube diameter > 17mm (e.g. T9) (no limitation of use until 31 December 2011; 15mg may be used per lamp after 31 December 2011)
- 2(b)(4) Lamps for other general lighting and special purposes (e.g. induction lamps) (no limitation of use until 31 December 2011; 15mg may be used per lamp after 31 December 2011)
- 3 Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):
- 3(a) Short length (≤ 500mm) (No limitation of use until 31 December 2011; 3.5mg may be used per lamp after 31 December 2011)
- 3(b) Medium length (> 500m and ≤ 1500mm) (No limitation of use until 31 December 2011; 5mg may be used per lamp after 31 December 2011)
- 3(c) Long length (> 1500mm) (No limitation of use until 31 December 2011; 13mg may be used per lamp after 31 December 2011)
- 4(a) Mercury in other low pressure discharge lamps (per lamp) (no limitation of use until 31 December 2011; 15mg may be used per lamp after 31 December 2011)
- 4(b) Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60:
- 4(b)-I P ≤ 155W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011)
- 4(b)-II 155W < P ≤ 405W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011)
- 4(b)-III P > 405W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011)
- 4(c) Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):
- 4(c)-I P≤ 155W (no limitation of use until 31 December 2011; 25mg may be used per burner after 31 December 2011)
- 4(c)-II 155W < P ≤405W (no limitation of use until 31 December 2011; 30mg may be used per burner after 31 December 2011)
- 4(c)-III P > 405W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011)
- 4(d) Mercury in High Pressure Mercury (vapour) lamps (HPMV) (expires on 13 April 2015)
- 4(e) Mercury in metal halide lamps (MH)
- 4(f) Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex
- 5(a) Lead in glass of cathode ray tubes
- 5(b) Lead in glass of fluorescent tubes not exceeding 0.2% by weight
- 6(a) Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35% lead by weight
- 6(b) Lead as an alloying element in aluminium containing up to 0.4% lead by weight
- 6(c) Copper alloy containing up to 4% lead by weight.
- 7(a) Lead in high melting temperature type solders (i.e. lead based alloys containing 85% by weight or more lead)
- 7(b) Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications
- 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
- 7(c)-II Lead in dielectric ceramic in capacitors for a rated voltage of 125V AC or 250V DC or higher
- 7(c)-III Lead in dielectric ceramic in capacitors for a rated voltage of less than 125V AC or 250V 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).



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### **ANNEX**

# **EXEMPTION LIST**

#### Continued

- 8(a) Cadmium and its compounds in one shot pellet type thermal cut-offs (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)
- 8(b) Cadmium and its compounds in electrical contacts
- Hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators up to 0.75% by weight in the cooling solution
- 9(b) Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications
- Lead used in other than C-press compliant pin connector systems (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)
- 13(a) Lead in white glasses used for optical applications
- 13(b) Cadmium and lead in filter glasses and glasses used for reflectance standards
- 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 (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)
- Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages
- 16 Lead in linear incandescent lamps with silicate coated tubes (expires on 1 September 2013)
- 17 Lead halide as radiant agent in High Intensity Discharge (HID) lamps used for professional reprography applications
- 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)<sub>2</sub>MgSi<sub>2</sub>O<sub>7</sub>:Pb) (expires on 1 January 2011)
- 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<sub>2</sub>O<sub>5</sub>:Pb)
- 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 Lams (ESL) (expire on 1 June 2011)
- 20 Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs) (expires on 1 June 2011)
- 21 Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glass
- 24 Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors
- 25 Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring
- Lead oxide in the glass envelope of Black Light Blue (BLB) lamps (expires on 1 June 2011)
- 29 Lead bound in crystal glass as defined in Annex 1 (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC
- 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
- Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting)
- 32 Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes
- 33 Lead in solders for the soldering of thin copper wires of 100 μm diameter and less in power transformers
- 34 Lead in cermet-based trimmer potentiometer elements
- 37 Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body
- 38 Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide
- 39 Cadmium in colour converting II-VI LEDs (< 10 μg Cd per mm² of light- emitting area) for use in solid state illumination or display systems (expires on 1 July 2014)