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CENTRE TESTING INTERNATIONAL



Applicant Address

ZHEJIANG CHINT INSTRUMENT&METER CO.,LTD BRIDGE INDUSTRIAL ZONE, YUEQING CITY, ZHEJIANG PROVINCE, **CHINA**

Conclusion

Tested Sample	According to directive	Result
Cubmitted Comple	RoHS Directive 2011/65/EU with	Pass [#]
Submitted Sample	amendment (EU) 2015/863	Pass

Tested

Approved by

Reviewed by

Lin Zhang

Mar. 22, 2018

Technical Manager

No. R340209947

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[#]CTI conducted Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs&PBDEs and Phthalates(DBP, BBP, DEHP, DIBP) on the components which were identified by the client, and the results shown on the report comply with the limits set by RoHS Directive2011/65/EU with amendment(EU) 2015/863.



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		Rep	ort Co	ntent			
Sample In	nformation		<u>(ii)</u>	• • • • • • • • • • • • • • • • • • • •	(3
Test Requ	uested						3
Photo(s)	of the Product(s)	• • • • • • • • • • • • • • • • • • • •		· · · · · · · · · · · · · · ·	(2)	4
Test Meth	nod	(C.)		(C.)			5
Test Resu	ılt(s)					• • • • • • • • • • • • • • • • • • • •	7
Chemical	Test Process		(0)		(0)		32
Photo(s)	of the Tested C	omponent(s	s)				35
RoHS Di	rective Exempt	tions		(<u>61</u>)	· · · · · · · · · · · · · · · · · · ·	(C.1)	40





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The following sample(s) and sample information was/were submitted and identified by/on the behalf of t he client.

Product Name single-phase smart meter

Sample Received Date Mar. 20, 2018

Testing Period Mar. 20, 2018 to Mar. 22, 2018

Client Reference Information:

Model	Reference voltage (V)	Current specification (A)	Degree of accuracy
		5(80)A	Class 1
DD0H4666	220	100A/40mA	Class 1
DDSU666	230	5(60)A	Class 1
(*)		1.5(6)A	Class 1

Test Requested

1. As specified by client, to screen Lead(Pb), Cadmium(Cd), Mercury(Hg), Chromium(Cr), Bromine(Br), Phthalates 【Dibutyl phthalate(DBP), Benzylbutyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP), Diisobutyl phthalate(DIBP)】 in the submitted sample(s).

2. As specified by client, when screening results exceed the screening limit in IEC 62321-3-1:2013 or screening limit of Phthalates in this report, further use of chemical methods are required to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs) and Phthalates 【Dibutyl

phthalate(DBP), Benzylbutyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP),



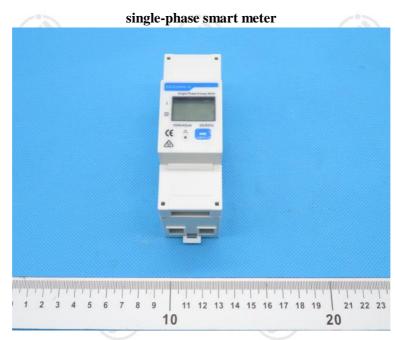
Diisobutyl phthalate(DIBP) I in the submitted samples.



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Photo(s) of the Product(s)



At the request of client, the sample photo below in this report is provided by applicant and is for reference only.







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Test Method

A. Screening limits for regulated elements according to IEC 62321-3-1:2013 (Unit: mg/kg)

Element	Polymers	Metals	Composite material		
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma)$ $\leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma)$ $\leq OL$	BL≤(500-3σ) <x <(1500+3σ)<br="">≤OL</x>		
Cd	BL≤(70-3σ) <x <(130+3σ)<br="">≤OL</x>	$BL \leq (70-3\sigma) < X < (130+3\sigma)$ $\leq OL$	LOD <x<(150+3σ) td="" ≤ol<=""></x<(150+3σ)>		
Hg	BL≤(700-3σ) <x <(1300+3σ)<br="">≤OL</x>	BL≤(700-3σ) <x <(1300+3σ)<br="">≤OL</x>	BL≤(500-3σ) <x <(1500+3σ)<br="">≤OL</x>		
Cr	BL≤(700-3σ)< X	BL≤(700-3σ)< X	BL≤(500-3σ)< X		
Br	BL≤(300-3σ)< X	N/A	BL≤(250-3σ)< X		

B. Screening limits for Phthalates

Test Item(s)		Screening limits(Unit: mg/kg)
Dibutyl phthalate(DBP)	6	BL≤600 <x< td=""></x<>
Benzylbutyl phthalate(BBP)		BL≤600 <x< td=""></x<>
Di-2-ethylhexyl phthalate(DEHP)		BL≤600 <x< td=""></x<>
Diisobutyl phthalate(DIBP)		BL≤600 <x< td=""></x<>

C. Chemical Test

or onement rest				
Tested Item(s)	Test Method	Measured Equipment(s)	MDL	Limit
Lood (Db)	IEC 62321-5:2013	ICP-OES	10 mg/kg	1000 m a/lva
Lead (Pb)	Refer to IEC 62321-5:2013	ICP-OES	10 mg/kg	1000 mg/kg
C- 4	IEC 62321-5:2013	ICP-OES	10 mg/kg	100 /1
Cadmium (Cd)	Refer to IEC 62321-5:2013	ICP-OES	10 mg/kg	100 mg/kg
M (II)	IEC 62321-4:2013	ICP-OES	10 mg/kg	1000 //
Mercury (Hg)	Refer to IEC 62321-4:2013	ICP-OES	10 mg/kg	1000 mg/kg
	IEC 62321-7-2:2017	UV-Vis	20 mg/kg	
Hexavalent Chromium(Cr(VI))	IEC 62321-7-1:2015	UV-Vis	0.10μg/cm ² (LOQ)	1000 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	100 mg/kg	1000 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS	100 mg/kg	1000 mg/kg
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS	50 mg/kg	1000 mg/kg for each







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Remark:

- BL = Under the screening limit
- OL = Above the screening limit
- X = The range of needing to do further testing
- 3σ = The reproducibility of analytical instruments
- N/A= Not applicable
- LOD= Detection limit
- LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is $0.10 \mu g/cm^2$







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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
")		Pb	BL	/	/	5)	(0,
		Cd	BL	/	/		
		Hg	BL	/	/		
	· ·	Cr(Cr(VI))	BL	1	/	/	-07
1	Grey-white plastic	Br(PBBs&PBDEs)	IN	1 (8	N.D.	PASS	Mar. 20, 2018
	plastic	DBP	N/A	BL	1	- //	
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	(P)	
		Pb	BL) /	/	5	(0.
		Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	1	1	/	· · ·
2	Grey-white	Br(PBBs&PBDEs)	IN	/ (@	N.D.	PASS	Mar. 20, 2018
	plastic	DBP	N/A	BL	1		
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	0	
		DIBP	N/A	BL	/		
)		Pb	BL	1	/		6.
		Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	1	/	/	in a
3	Grey-white	Br(PBBs&PBDEs)	IN	/	N.D.	PASS	Mar. 20, 2018
	plastic	DBP	N/A	BL	/		
		BBP	N/A	BL	/		
		DEHP	N/A	BL	1	0	
		DIBP	N/A	BL	1 6		
/		Pb	BL	1	/		
		Cd	BL	/	/		
	200	Hg	BL	/	/		
		Cr(Cr(VI))	BL	1	1		
4	Grey-white	Br(PBBs&PBDEs)	IN	/	N.D.	PASS	Mar. 20, 2018
	plastic	DBP	N/A	BL	/		, , ,
		BBP	N/A	BL	/	*>	
		DEHP	N/A	BL	1		/°5
		DIBP	N/A	BL	,	(1)	(2)





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	16	(1)	(1)
		Cd	BL	1	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
5	Soldering tin	Br(PBBs&PBDEs)	N/A	1	1	PASS	Mar. 20, 2018
		DBP	N/A	/ (6	/	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	0	-0-
		Pb	BL	/	/		
		Cd	BL	1	/		0
		Hg	BL	/	/	-	
		Cr(Cr(VI))	BL	/	/	=	
6	Cupreous	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	metal	DBP	N/A	/	/	(6	
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	2	/05
})		Pb	BL	,	/		
		Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
7	Cupreous	Br(PBBs&PBDEs)	N/A	1	1	PASS	Mar. 20, 2018
	metal	DBP	N/A	/	1	(5-)
		BBP	N/A	/	/		
		DEHP	N/A	/	/	-	
		DIBP	N/A	1	1	22	(3)
·)		Pb	BL	/	/	(5)	(8
	2	Cd	BL	/	/		
	Mark 1 20	Hg	BL	/	/	-	
		Cr(Cr(VI))	IN	/	N.D.▼	_	
8	Metal with light	Br(PBBs&PBDEs)	N/A	/	N.D.	PASS	Mar. 20, 2018
O	multicolor plating	DBP	N/A	16	/	I ASS	Iviai. 20, 2018
	prating			/	/	-	
		BBP	N/A	/		_	
		DEHP	N/A	/	/	2	/05





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received Resubmitted Date
		Pb	BL	/	1	(1)	(45)
	1	Cd	BL	1	/		(0)
		Hg	BL	/	/		
	Metal with	Cr(Cr(VI))	IN	/	N.D. [▼]		
9	light multicolor	Br(PBBs&PBDEs)	N/A	1	1	PASS	Mar. 20, 2018
	plating	DBP	N/A	1	/	(6	37)
		BBP	N/A	/	1		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	0	_ **
(2)	:(Pb	BL	/	1		(3
	,	Cd	BL	1	/		0
		Hg	BL	/	/		
	Metal with	Cr(Cr(VI))	IN	/	N.D.▼		
10	light multicolor	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	plating	DBP	N/A	/	/	(6	3
		BBP	N/A	/	/		
		DEHP	N/A	/	/	-	
		DIBP	N/A	/	/	200	/*
})		Pb	BL	/	/	(5)	(2)
	,	Cd	BL	/	/		0
		Hg	BL	/	/	-	
		Cr(Cr(VI))	BL	/	/		
11	Metal with	Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
	silvery plating	DBP	N/A	/	1	16	5
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	100	(2)
*)		Pb	BL	/	/	(5)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0	Cr(Cr(VI))	BL	/	/		
12	Plastic with multicolor	Br(PBBs&PBDEs)	BL	,	/	PASS	Mar. 20, 2018
	printing	DBP	N/A	BL	,	- 11100	1,141. 20, 2010
		BBP	N/A	BL	/	-	
		DEHP			/	1	
	2	DEUL	N/A	BL	/	0	_0





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	/	(1)	
	1	Cd	BL	1	/	2	0
		Hg	BL	/	/		
	Colorless	Cr(Cr(VI))	BL	/	/		
13	transparent	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	plastic	DBP	N/A	BL	/	(6	37)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	0	
		Pb	BL	/	1		(25)
	,	Cd	BL	1	/	2	0
		Hg	BL	/	/		
	a., , , , ,	Cr(Cr(VI))	BL	/	/		
14	Silvery label with black	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	printing	DBP	N/A	BL	/	(6	3
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	2	(3
(1)		Pb	BL	/	/ (6		(25)
	,	Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/	-	
15	Grey plastic	Br(PBBs&PBDEs)	BL	16	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	(5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	-	
		DIBP	N/A	BL	1	· >	
>)		Pb	BL	/	/ ((5)	(6.5)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-07	Cr(Cr(VI))	BL	1	/		
16	White plastic	Br(PBBs&PBDEs)	BL	/	/	PASS	Mar. 20, 2018
10	Winte plastic	DBP	N/A	BL	/	17100	Wiai. 20, 2010
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	-:-	
		DERP	1 V /A	DL	/		_0_





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(~3)
	1	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
17	Silvery metal pin	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
		DBP	N/A	/	/	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	0	
	. (Pb	BL	/	/		(65)
		Cd	BL	/ /	/		
		Hg	BL	/	/		
	Colorless	Cr(Cr(VI))	BL	/	/		
18	transparent	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	glass	DBP	N/A	BL	/		5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	6	(3
((Pb	BL	/	/ (6	(2)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	Colorless	Cr(Cr(VI))	BL	/	/		
19	transparent	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	glass	DBP	N/A	BL	1	10	3)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	(Pi)	(3
•	1	Pb	BL	/	/	5)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	· · ·	Cr(Cr(VI))	BL	1	/		**
20	White plastic	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	1	10	
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/		





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	
	1	Cd	BL	1	/	2	0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
21	White plastic	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	(6	
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	0	
	- (Pb	BL	/	1		(2)
	,	Cd	BL	1	/	2	(6)
		Hg	BL	/	/		
	6.1.1	Cr(Cr(VI))	BL	/	/		
22	Colorless transparent	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	plastic	DBP	N/A	/	N.D.		3
		BBP	N/A	/	N.D.		C.S.
		DEHP	N/A	/	N.D.	-	
		DIBP	N/A	/	N.D.	2	
(1)		Pb	BL	/	/		(25)
	1	Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/	-	
23	Green plastic	Br(PBBs&PBDEs)	BL	16	/	PASS	Mar. 20, 2018
	(C)	DBP	N/A	BL	/	(6	5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	-	
		DIBP	N/A	BL	1	120	(3)
•)	(Pb	BL	/	/ (6	(2)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/	-	
		Cr(Cr(VI))	BL	1	/		
24	Metal with light blue	Br(PBBs&PBDEs)	N/A	, (3	,	PASS	Mar. 20, 2018
<i>⊑</i> -T	plating	DBP	N/A	/	/	11100	Witti. 20, 2016
		BBP	N/A	/	/	-	
		DEHP	N/A	/	/	-	
		DERP	IN/A	/	/	:5	





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ested ole/Part ription Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
Pb	N/A	/	N.D.		(2)
Cd	N/A	/ /	N.D.		0
Hg	N/A	/	N.D.		
Cr(Cr(VI))	N/A	/	N.D. [▼]		
lvery ating Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
DBP	N/A	/	1	(6	37)
BBP	N/A	/	/		
DEHP	N/A	/	/		
DIBP	N/A	/	/	0	
Pb	OL	/	^{#1} 19110		(2)
Cd	BL	1	/	2	(6)
Hg	BL	/	/		
Cr(Cr(VI))	BL	/	/		
al base Br(PBBs&PBDEs)	N/A	1	1	PASS	Mar. 20, 2018
DBP	N/A	/	1	(6	5)
BBP	N/A	/	/		
DEHP	N/A	/	/	-	
DIBP	N/A	/	1	2	(3)
Pb	N/A	/	N.D.	(2)	(23)
Cd	N/A	/	N.D.		
Hg	N/A	/	N.D.	-	
Cr(Cr(VI))	N/A	/	N.D. [▼]	-	
lvery Br(PRRs&PRDFs)	N/A	1	/	PASS	Mar. 20, 2018
ating DBP	N/A	/	1	1	5
BBP	N/A	/	/	-	
DEHP	N/A	/	/	-	
DIBP	N/A	/	1	:	(3)
Pb	OL	/	^{#1} 19110	(5)	(6,5)
Cd	BL	/	/		
Hg	BL	/	/		
Cr(Cr(VI))	BL	1	/		
al base Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
DBP	N/A	/	/	1 ASS	wiai. 20, 2016
	+	·	/		
BBP	N/A	/		-	
- °	1	10		2	/3
	DEHP DIBP	DEHP N/A	DEHP N/A /	DEHP N/A / /	DEHP N/A / /





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(2)
	1	Cd	BL	1	/	2	0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
27	Black plastic	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	(6	37)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	0	_0
(2)		Pb	BL	/	1		(65)
		Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
28	Silvery metal	Br(PBBs&PBDEs)	N/A	1	1	PASS	Mar. 20, 2018
	(0,)	DBP	N/A	/	/	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/	-	
		DIBP	N/A	/	1	20	73
(*)		Pb	BL	/	/	(5)	(65)
	,	Cd	BL	/	/		
		Hg	BL	/	/	-	
	-0-	Cr(Cr(VI))	BL	/	/		
29	Bimetal piece	Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
		DBP	N/A	/	1	10	5
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1		(3
•)		Pb	BL	/	/	N)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/	-	
	-0	Cr(Cr(VI))	BL	/	/		
30	Silvery metal	Br(PBBs&PBDEs)	N/A	1 (3	/	PASS	Mar. 20, 2018
	Jan	DBP	N/A	/	/		25, 2516
		BBP	N/A	/	/	-	
		DEHP	N/A	/	/		
	3	DIBP	N/A	/	/		/3





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	
	1	Cd	BL	/	/	2	(0)
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
31	Black plastic	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	1	(6	37)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	0	
(4)		Pb	BL	/	1		(25)
		Cd	BL	1	/	2	0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/	•	
32	Yellow solid	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	(0,)	DBP	N/A	BL	/	(6	3
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1		/%
(*)		Pb	BL	/	/		(25)
	,	Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/	-	
33	Silvery metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	pin	DBP	N/A	/	1	(5
		BBP	N/A	/	/		
		DEHP	N/A	/	/	-	
		DIBP	N/A	/	1	:	(3)
~)		Pb	BL	/	/	(5)	(6.5)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-07	Cr(Cr(VI))	IN	/	N.D.		
34	Black solid	Br(PBBs&PBDEs)	BL	/	/ /	PASS	Mar. 20, 2018
54	Diack solid	DBP	N/A	BL	/	17100	With 20, 2010
		BBP	N/A	BL	/		
					/	-	
		DEHP	N/A	BL	/	0	_05





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(25)
	1	Cd	BL	/ /	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	IN	/	N.D.		
35	Green body	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	(6	37)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	0	
(2)		Pb	BL	/	/	(1)	(65)
	,	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
36	Silvery metal	Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
	pin	DBP	N/A	/ (6	/	(6	3
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	/		/*5
(*)		Pb	BL	/	/		(8)
		Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
37	Black plastic	Br(PBBs&PBDEs)	IN	1 (2	N.D.	PASS	Mar. 20, 2018
	(C)	DBP	N/A	BL	/	16	5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	100	(3
-)		Pb	OL	/	^{#1} 25615	(5)	(6,5)
	2	Cd	BL	/	/		
		Hg	BL	/	/		
	-05	Cr(Cr(VI))	BL	/	/	100	
38	Brass metal	Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
30	Diass illetai	DBP	N/A	/	/	1 A00	Wiai. 20, 2016
					/		
		BBP	N/A	/			
	3	DEHP	N/A	/	/	:5	/3
(2)		DIBP	N/A	/	/		(2)





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	/	(1)	(2)
	1	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
39	Red LED	Br(PBBs&PBDEs)	IN	1	N.D.	PASS	Mar. 20, 2018
		DBP	N/A	/	N.D.	(6	37)
		BBP	N/A	/	N.D.		
		DEHP	N/A	/	N.D.		
		DIBP	N/A	/	N.D.	•>	
(2)		Pb	BL	/	/		(65)
		Cd	BL	/ /	/		(6)
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
40	Silvery metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	pin	DBP	N/A	/	/	(6	5)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
	4	DIBP	N/A	/	1	25	(°5
(*)		Pb	BL	/	/ (6		(6.5)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		
41	White plastic	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	6.)	DBP	N/A	BL	1	10	5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	a:	(3
•)		Pb	BL	/	/	5)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		
42	White plastic	Br(PBBs&PBDEs)	BL	/	/	PASS	Mar. 20, 2018
_		DBP	N/A	BL	/		2)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
	2	DIBP	N/A	BL	/		(3





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
	(Pb	BL	/	1	(1)	
	\	Cd	BL	/ /	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
43	Metal with silvery plating	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	shivery placing	DBP	N/A	/ (8	/	(4	
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	/	0	
.)	(Pb	BL	/	1		(23)
		Cd	BL	1	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
44	Black wire jacket	Br(PBBs&PBDEs)	BL	1	1	PASS	Mar. 20, 2018
	jacket	DBP	N/A	/ 10	97	(5
		BBP	N/A	/	N.D.		
		DEHP	N/A	/	270	-	
		DIBP	N/A	/	N.D.	20	(3)
})	(Pb	BL	/	/	(5)	(6)
	,	Cd	BL	/	/		
		Hg	BL	/	/	-	
	M . 1 .	Cr(Cr(VI))	BL	/	/		
45	Metal wire with silvery	Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
	plating	DBP	N/A	/	1	/	5
		BBP	N/A	/	/	-	
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	100	
• (*	(Pb	BL	/	/	()	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		
46	Black plastic with white	Br(PBBs&PBDEs)	BL	16	/	PASS	Mar. 20, 2018
	printing	DBP	N/A	BL	/		2010
		BBP	N/A	BL	/	1	
		DEHP	N/A	BL	/	1	
	1	DIBP	N/A	BL	/	100	(3)





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
(1)		Pb	BL	/	1	(1)	(20)
	1	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
47	Silvery metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
		DBP	N/A	/	/	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	/	0	
.")	. (Pb	BL	/	1		(2)
		Cd	BL	1	/	2	
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/	-	
48	Black rubber	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	(6,5)	DBP	N/A	/	N.D.	(5
		BBP	N/A	/	N.D.		
		DEHP	N/A	/	N.D.	-	
		DIBP	N/A	/	N.D.	and the same	(3)
· ")		Pb	BL	/	/ (6	(2)	(6,7)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		
49	Silvery metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
		DBP	N/A	/	1	19	
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1		
•)		Pb	BL	1	/	5)	(0)
		Cd	BL	/	/		
		Hg	BL	/	/		
	· >	Cr(Cr(VI))	BL	1	/	2	
50	Brown paper	Br(PBBs&PBDEs)	BL	/	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	1	1	
		BBP	N/A	BL	/	1	
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1		





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
	1	Pb	BL	/	1	(1)	
	1	Cd	BL	/	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
51	Silvery metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
		DBP	N/A	/	/	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	0	_ 0
	1	Pb	BL	/	/		(65)
		Cd	BL	/ /	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
52	Silver-grey metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	metai	DBP	N/A	/	/		5
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	a:	(3)
×*)		Pb	BL	/	/ (6	(2)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		
53	Light yellow solid	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	sond	DBP	N/A	BL	1	10	3)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	(Pi)	C
·)		Pb	BL	/	/	5)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	1	/		**
54	Cupreous	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	metal wire	DBP	N/A	/	1	10	
		BBP	N/A	/	/		
		DEHP	N/A	/	/		>==
		DIBP	N/A	/	/		





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(25)
	1	Cd	BL	1	/		0
		Hg	BL	/	/		
	_	Cr(Cr(VI))	BL	/	/		
55	Cupreous metal wire	Br(PBBs&PBDEs)	N/A	1	1	PASS	Mar. 20, 2018
		DBP	N/A	/	1	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	0	_ 03
		Pb	BL	/	1		(65)
	,	Cd	BL	/ /	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
56	Cupreous metal wire	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	metai wiie	DBP	N/A	/	/		3
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	200	/°3
((Pb	BL	/	/	(5)	(6)
	,	Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		
57	PCB	Br(PBBs&PBDEs)	IN	1	N.D.	PASS	Mar. 20, 2018
	6,	DBP	N/A	BL	1	10	5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	=	
		DIBP	N/A	BL	1	100	(3
-)		Pb	BL	/	/	5	(6)
		Cd	BL	/	/		
		Hg	BL	/	/	1	
	-0-	Cr(Cr(VI))	BL	/	/		
58	Soldering tin	Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
	, , , , , , , , , , , , , , , , , , ,	DBP	N/A	/	/	1	25,2010
		BBP	N/A	/	/	-	
		DEHP	N/A	/	/	-	
		DIBP	N/A	/	/	° > \	(3)





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
	(Pb	BL	/	/	(1)	
	,	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
59	White plastic	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	(
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	07	· ·
(1)	. (Pb	BL	/	1		(20)
	,	Cd	BL	/ /	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
60	White plastic	Br(PBBs&PBDEs)	BL	1 (/	PASS	Mar. 20, 2018
	(6,0)	DBP	N/A	BL	/	(
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	6.0	C°S
-)		Pb	BL	/	/ ((2)	(67)
	,	Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		10
61	Black body	Br(PBBs&PBDEs)	BL	1 (2	/	PASS	Mar. 20, 2018
	6.	DBP	N/A	BL	/ /	19	6
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	(Pi	
•)		Pb	BL	/	/		(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-05	Cr(Cr(VI))	BL	1	/		
62	Yellow-brown	Br(PBBs&PBDEs)	BL	1 6	/	PASS	Mar. 20, 2018
	body	DBP	N/A	BL	/	//	
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
	1	DIBP	N/A	BL	/		





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(20)
	1	Cd	BL	/	/	2	0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
63	Black body	Br(PBBs&PBDEs)	IN	1	N.D.	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	(6	37)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	0	· · ·
(2)	- (Pb	BL	/	1	(1)	(2)
	,	Cd	BL	/ /	/	2	0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
64	Silvery metal	Br(PBBs&PBDEs)	N/A	/	/	PASS	Mar. 20, 2018
	pin	DBP	N/A	/	/	(6	3
		BBP	N/A	/	/		
		DEHP	N/A	/	/	-	
	,	DIBP	N/A	/	1	2	/*>
,)		Pb	BL	/	/ (6	(2)	(2)
	,	Cd	BL	/	/		
		Hg	BL	/	/	-	
		Cr(Cr(VI))	BL	/	/	-	
65	Black body	Br(PBBs&PBDEs)	IN	/	N.D.	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	/	5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	-	
		DIBP	N/A	BL	1	12:	(3)
- (*		Pb	BL	/	/	(2)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/	-	
	-0-	Cr(Cr(VI))	BL	/	/	93	
66	PCB	Br(PBBs&PBDEs)	IN	/	N.D.	PASS	Mar. 20, 2018
50		DBP	N/A	BL	/	- 1100	11111 20, 2010
		BBP	N/A	BL	/	-	
		DEHP	N/A	BL	/	-	
	3	DIBP	N/A	BL	/	:5	(3)





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(25)
	1	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
67	Silvery metal pin	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
		DBP	N/A	/	/	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	000	_ 0 =
(2)		Pb	#23.0×10 ³	/	1		(65)
		Cd	BL	1	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	IN	/	N.D.	-	
68	Black chip resistor	Br(PBBs&PBDEs)	BL	1	1	PASS	Mar. 20, 2018
	resistor	DBP	N/A	BL	/		3)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	20	(3)
(*)		Pb	#25.1×10 ⁴	/	/	(5)	(6,5)
	,	Cd	BL	/	/		
		Hg	BL	/	/	=	
	-0-	Cr(Cr(VI))	BL	/	/		
69	Black body	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	1	10	
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	-	
		DIBP	N/A	BL	1	Ti.	(3
•)		Pb	BL	/	/	3)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-0	Cr(Cr(VI))	BL	1	/		
70	Silvery metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	pin	DBP	N/A	/	1	1	2
		BBP	N/A	/	/	-	
		DEHP	N/A	/	/	-	_
		DIBP	N/A	/	,		(3)





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	
	1	Cd	BL	1	/	2	(6)
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
71	Soldering tin	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
		DBP	N/A	/	/	(4	
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	/	0	
	(Pb	BL	/	1		
		Cd	BL	/ /	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
72	Silvery metal pin	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	Pili	DBP	N/A	/ (6	1	(5
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	6	
- (-		Pb	BL	/	/ (6	(2)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
73	Black body	Br(PBBs&PBDEs)	BL	/ (3	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	1	//	
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1		
•)		Pb	BL	/	/	5)	(0)
		Cd	BL	/	/		
		Hg	BL	/	/		
	· -	Cr(Cr(VI))	BL	1	/		
74	Black body	Br(PBBs&PBDEs)	BL	/	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	1	//	
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	100	





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(2)
	1	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
75	Silvery metal pin	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
		DBP	N/A	/	/	(6	37)
		BBP	N/A	/	/		
		DEHP	N/A	/	/		
		DIBP	N/A	/	/	•>	-07
77)		Pb	#22.1×10 ³	/	1		(3)
	,	Cd	BL	1	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
76	Black body	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	(0,)	DBP	N/A	BL	1	(6	5)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	25	
)		Pb	BL	/	/	(5)	(6)
	,	Cd	BL	/	/		
		Hg	BL	/	/		
	-0-	Cr(Cr(VI))	BL	/	/		
77	White plastic	Br(PBBs&PBDEs)	BL	/	/	PASS	Mar. 20, 2018
	6,	DBP	N/A	BL	/ /	10	5
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	1	a.	(3
•)	- 1	Pb	BL	/	/		(6)
		Cd	BL	/	/		
		Hg	BL	/	/		
	-07	Cr(Cr(VI))	BL	/	/		
78	White plastic	Br(PBBs&PBDEs)	BL	/	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	/		
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
	1	DIBP	N/A	BL	/		(3





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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(25)
	1	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	IN	/	N.D.		
79	Brown body	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
		DBP	N/A	BL	/	(6	57)
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
		DIBP	N/A	BL	/	0	_ 07
.")		Pb	BL	/	1		(3)
	,	Cd	BL	1	/		0
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	/	/		
80	Black body	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
	(6,)	DBP	N/A	BL	/	(6	3
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/	1	
		DIBP	N/A	BL	1	200	
)		Pb	BL	/	/ (6	(5)	(6.5)
	1	Cd	BL	/	/		
		Hg	BL	/	/	1	
	-0-	Cr(Cr(VI))	BL	/	/	1	
81	Silvery metal	Br(PBBs&PBDEs)	N/A	1	/	PASS	Mar. 20, 2018
	pin	DBP	N/A	/	1	//	5
		BBP	N/A	/	/	1	
		DEHP	N/A	/	/		
		DIBP	N/A	/	1	100	(3
- (*		Pb	BL	/	/	(5)	(6)
		Cd	BL	/	/		
		Hg	BL	/	/	1	
	-0	Cr(Cr(VI))	BL	1	/		
82	PCB	Br(PBBs&PBDEs)	IN	/	N.D.	PASS	Mar. 20, 2018
02		DBP	N/A	BL	/	- 17100	1.141. 20, 2010
		BBP	N/A	BL	/	-	
		-			/	+	
	3	DEHP DIBP	N/A N/A	BL BL	/	0	/07



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Sample No.	Tested Sample/Part Description	Tested Items	XRF Screening Test	Phthalates Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date
		Pb	BL	/	1	(1)	(21)
	,	Cd	BL	/ /	/	2	0
		Hg	BL	/	/		
	-05	Cr(Cr(VI))	BL	/	/		
83	Black body	Br(PBBs&PBDEs)	BL	1	/	PASS	Mar. 20, 2018
1	6.	DBP	N/A	BL	/ /	16	3
		BBP	N/A	BL	/		
		DEHP	N/A	BL	/		
10		DIBP	N/A	BL	1		
		Pb	BL	1	/		0.
		Cd	BL	/	/		
		Hg	BL	/	/		
		Cr(Cr(VI))	BL	1	/	/	
84	Soldering tin	Br(PBBs&PBDEs)	N/A	/ (6	1	PASS	Mar. 20, 2018
		DBP	N/A	/	/		
		BBP	N/A	/	/		
10.		DEHP	N/A	/	1	Ti.	(3)
N)		DIBP	N/A	/	/	37)	(6)

Remark:

- N.D. = Not Detected (<MDL or LOQ)
- MDL = Method Detection Limit
- mg/kg = ppm = parts per million
- 1000mg/kg=0.1%
- /=Not tested
- IN= Uncertain, Further chemical test
- N/A= Not applicable
- BL = Under the screening limit
- OL = Further chemical test will be conducted while the result is above the screening limit.
- The sample is negative for Cr(VI) The Cr(VI) concentration is below 0.10μg/cm². The coating is considered a non-Cr(VI) based coating.
- When conducting the test for PBBs&PBDEs, XRF was introduced to screen Br Exclusively; When conducting the test for Hexavalent Chromium, XRF was introduced to screen Chromium exclusively.
- **According to the client's statement, the material of the sample(s) fall into exemption items 6(c)according to EU Directive 2011/65/EU: Copper alloy containing up to 4% lead by weight.



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- **2According to the client's statement, the material of the sample(s) fall into exemption items 7(c)-IV according to EU Directive 2011/65/EU: Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors.
- The test result(s) of this report is/are presented in reference to the result(s) that reported in A2180032464101001.
- According to the client's statement, Reference information see the following table:

Sample No.	Reference Report No.	Sample No. in Reference Report
(6) 1	A2180009119101001R1	1 (5)
2	A2180009119101001R1	1
3	A2180009119101001R1	1
4	A2180009119101001R1	° 1
5	A2180009119101001R1	19
6	A2180009119101001R1	15
7	A2180009119101001R1	15
8	A2180009119101001R1	11
9	A2180009119101001R1	11
10	A2180009119101001R1	11
11	A2180009119101001R1	14
12	A2180009119101001R1	7
13	A2180009119101001R1	8
14	A2180009119101001R1	10
15	A2180009119101001R1	84
16	A2180009119101001R1	85
17	A2180009119101001R1	86
18	A2180009119101001R1	87
19	A2180009119101001R1	87
20	A2180009119101001R1	80
21	A2180009119101001R1	80
22	A2180009119101001R1	82
23	A2180009119101001R1	67
24	A2180009119101001R1	70
25.1	A2180009119101001R1	69.1
25.2	A2180009119101001R1	69.2
26.1	A2180009119101001R1	69.1
26.2	A2180009119101001R1	69.2
27	A2180009119101001R1	58
28	A2180009119101001R1	59
29	A2180009119101001R1	60



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Sample No.	Reference Report No.	Sample No. in Reference Report
30	A2180009119101001R1	61
31	A2180009119101001R1	62
32	A2180009119101001R1	51
33	A2180009119101001R1	49
34	A2180009119101001R1	50
35	A2180009119101001R1	45
36	A2180009119101001R1	44
37	A2180009119101001R1	130
38	A2180009119101001R1	2
39	A2180009119101001R1	52
40	A2180009119101001R1	44
41	A2180009119101001R1	25
42	A2180009119101001R1	25
43	A2180009119101001R1	41
44	A2180009119101001R1	28
45	A2180009119101001R1	27
46	A2180009119101001R1	73
47	A2180009119101001R1	72
48	A2180009119101001R1	75
49	A2180009119101001R1	74
50	A2180009119101001R1	79
51	A2180009119101001R1	77
52	A2180009119101001R1	76
53	A2180009119101001R1	93
54	A2180009119101001R1	101
55	A2180009119101001R1	101
56	A2180009119101001R1	101
57	A2180009119101001R1	108
58	A2180009119101001R1	19
59	A2180009119101001R1	25
60	A2180009119101001R1	25
61	A2180009119101001R1	113
62	A2180009119101001R1	115
63	A2180009119101001R1	131
64	A2180009119101001R1	44
65	A2180009119101001R1	133
66	A2180009119101001R1	108





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Sample No.	Reference Report No.	Sample No. in Reference Report
67	A2180009119101001R1	44
68	A2180009119101001R1	137
69	A2180009119101001R1	132
70	A2180009119101001R1	44
71	A2180009119101001R1	19
72	A2180009119101001R1	44
73	A2180009119101001R1	128
74	A2180009119101001R1	109
75	A2180009119101001R1	110
76	A2180009119101001R1	107
77	A2180009119101001R1	25
78	A2180009119101001R1	25
79	A2180009119101001R1	134
80	A2180009119101001R1	126
81	A2180009119101001R1	125
82	A2180009119101001R1	108
83	A2180009119101001R1	127
84	A2180009119101001R1	19



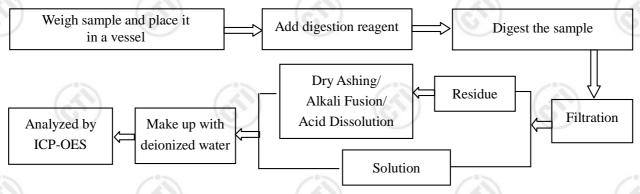


Report No. A218003246410100101

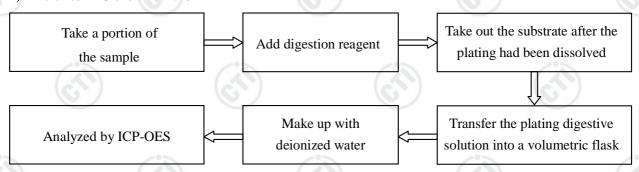
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Chemical Test Process

- 1. Lead (Pb), Cadmium (Cd)
- 1) IEC 62321-5:2013

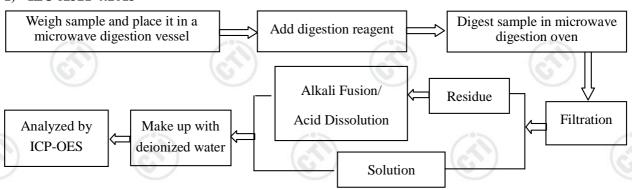


2) Refer to IEC 62321-5:2013

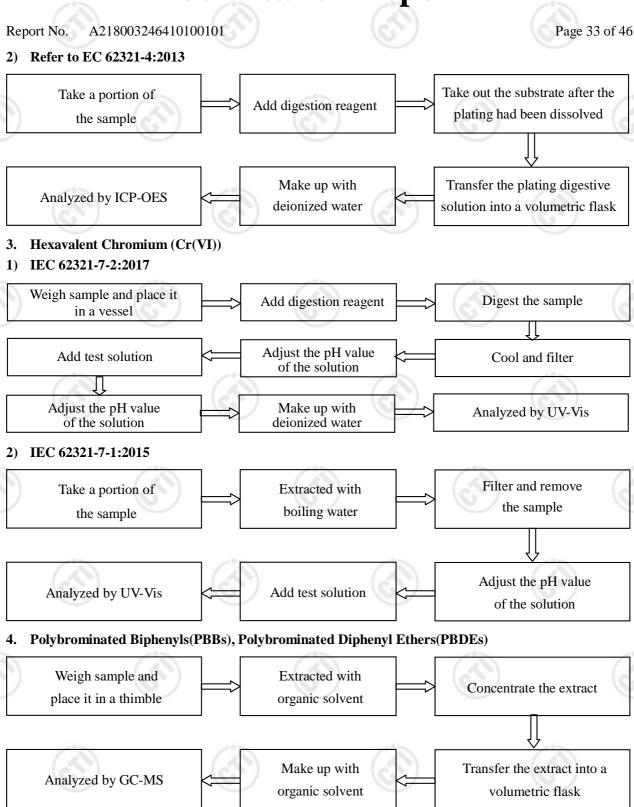


2. Mercury (Hg)

1) IEC 62321-4:2013





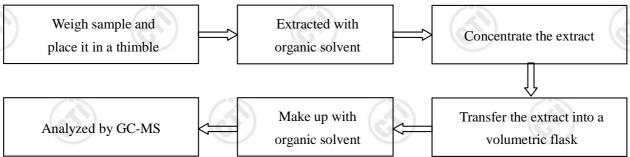


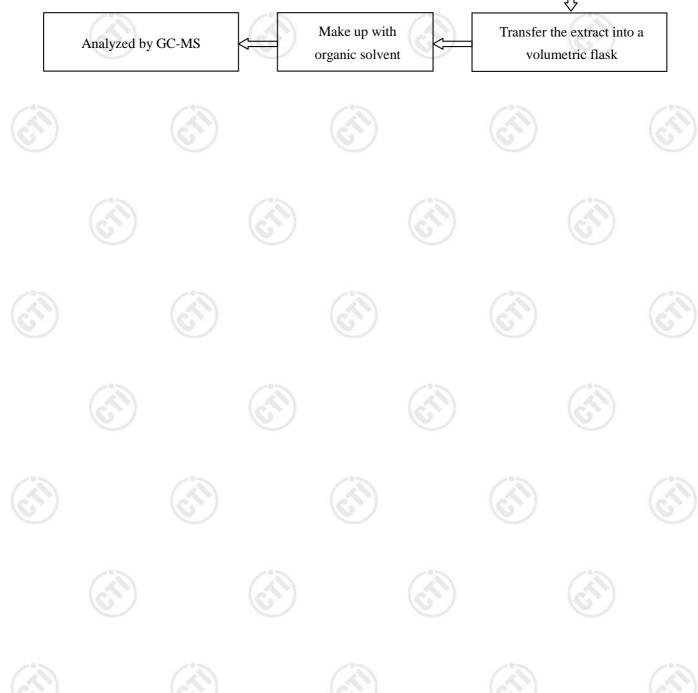




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5. Phthalates(DBP, BBP, DEHP, DIBP)



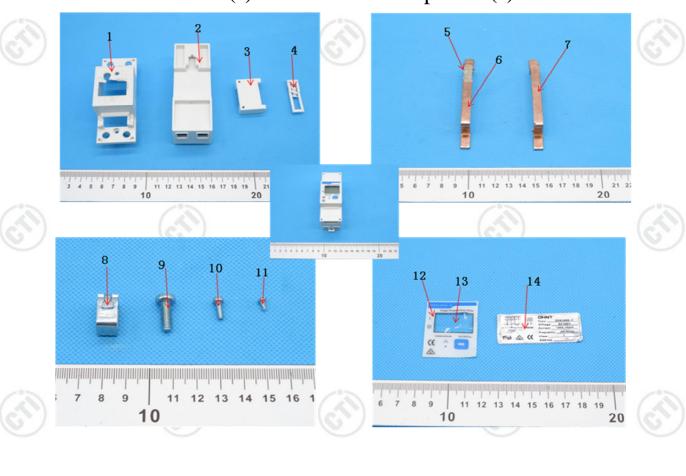


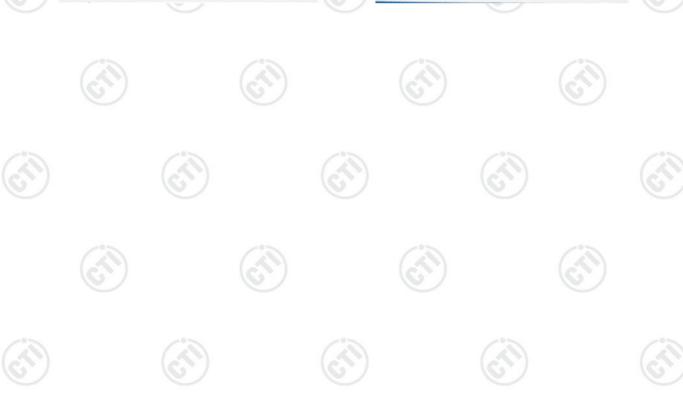


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Photo(s) of the tested component(s)

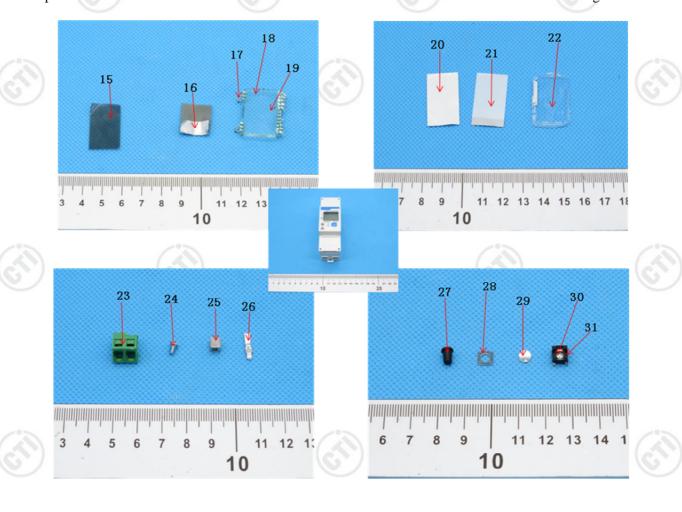






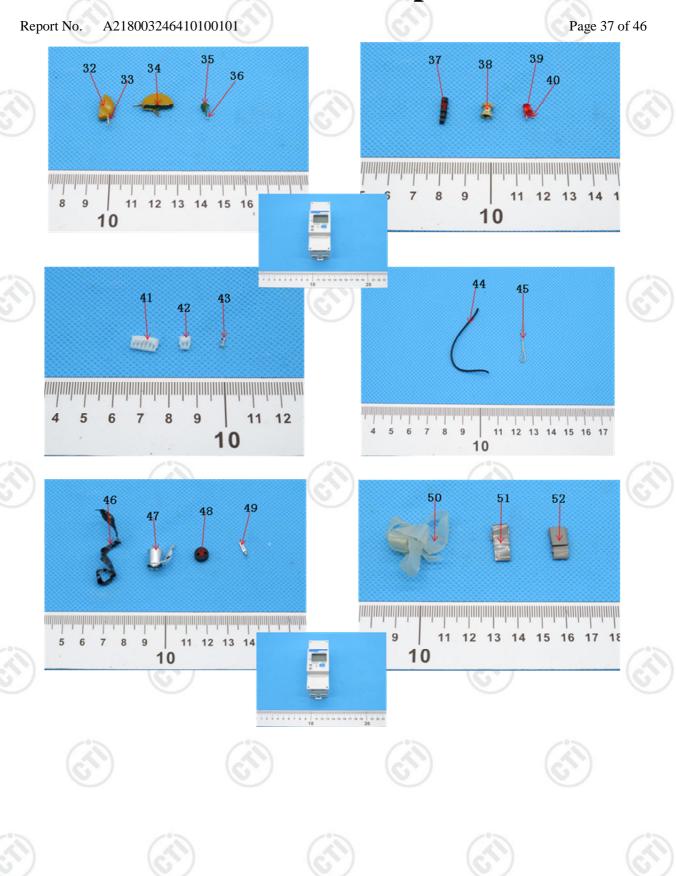
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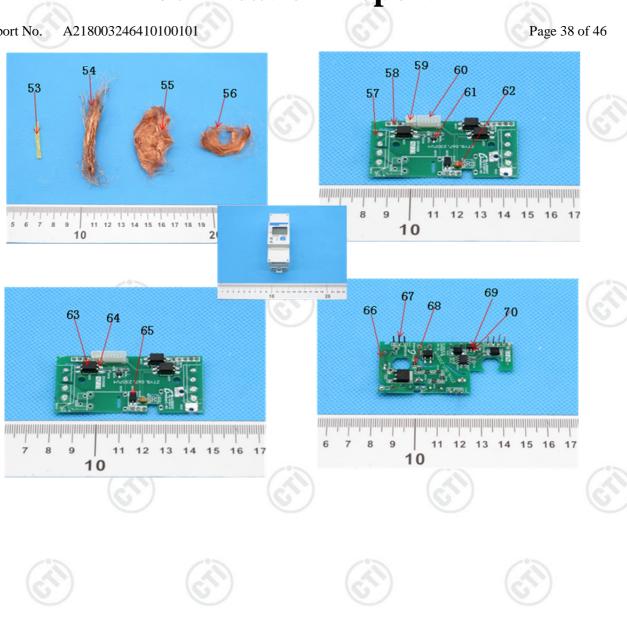






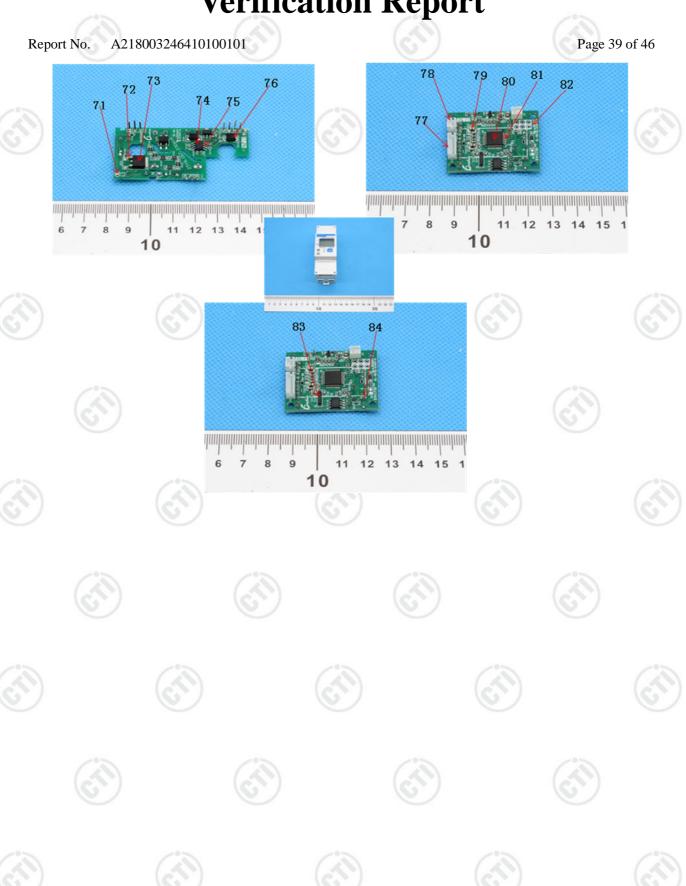
















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Exempted Items of RoHS Directive

In accordance with Directive 2011/65/EU as amended , there are 41 exemption items in Annex III of 2011/65/EU altogether.

	Exemption	Scope and dates of applicability
1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):	scope and dates of apprecionity
1(a)	For general lighting purposes < 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.
1(b)	For general lighting purposes ≥ 30 W and < 50 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011.
1(c)	For general lighting purposes ≥ 50 W and < 150 W: 5 mg	
1(d)	For general lighting purposes ≥ 150 W: 15 mg	
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤17 mm	No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011.
1(f)	For special purposes: 5 mg	
1(g)	For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg	Expires on 31 December 2017.
2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	
2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 5 mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011.
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 5 mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011.
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 5 mg	Expires on 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011.
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012.
2(a)(5)	Tri-band phosphor with long lifetime (≥ 25 000 h): 8 mg	Expires on 31 December 2011; 5 mg 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 > 28 mm (e.g. T10 and T12): 10 mg	Expires on 13 April 2012.
2(b)(2)	Non-linear halophosphate lamps (all diameters): 15 mg	Expires on 13 April 2016.



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2(b)(3)	Non-linear tri-band phosphor lamps with tube	No limitation of use until 31 December 2011; 15
	diameter > 17 mm (e.g. T9)	mg may be used per lamp after 31 December 2011.
2(b)(4)	Lamps for other general lighting and special	No limitation of use until 31 December 2011; 15
(0)	purposes (e.g. induction lamps).	mg 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 (≤500 mm)	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011.
3(b)	Medium length (> 500 mm and ≤ 1 500 mm)	No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011.
3(c)	Long length (> 1500 mm)	No limitation of use until 31 December 2011; 13 mg 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; 15 mg 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 ≤ 155 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011.
4(b)-II	155 W < P≤405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011.
4(b)-III	P > 405 W	No limitation of use until 31 December 2011; 40 mg 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 ≤ 155 W	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011.
4(c)-II	155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011.
4(c)-III	P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011.
4(d)	Mercury in High Pressure Mercury (vapour)	Expires on 13 April 2015.
103	lamps (HPMV).	
4(e)	Mercury in metal halide lamps (MH)	(6)



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4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex.		, 69
4(g)	Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows:	Expires on 31 December 2018.	(C)
	(a) 20 mg per electrode pair + 0,3 mg per tube length in cm ,but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20°C;	Cil	(cfi)
	(b) 15 mg per electrode pair + 0,24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications.		(3)
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.	(ii)	Cil
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.	(2)	
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.	(cit)	(Š
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher.	(cfi)	(F)
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 a be used in spare parts for EEE pl market before 1 January 2013.	=





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7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors.	
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.	
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.	
9(b)	Lead in bearing shells and bushes for refrigerant -containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications.	Applies to categories 8, 9 and 11; expires on: -21 July 2023 for category 8 in vitro diagnostic medical devices; -21 July 2024 for category 9 industrial monitoring
	аррисацонѕ.	and control instruments and for category 11; -21 July 2021 for other subcategories of categories 8 and 9.
9(b)-(I)	Lead in bearing shells and bushes for refrigerant -containing hermetic scroll compressors with a stated electrical power input equal or below 9	Applies to category 1; expires on 21 July 2019.
	kW for heating, ventilation, air conditioning and refrigeration (HVACR) applications.	(cf) (cf)
11(a)	Lead used in C-press compliant pin connector systems.	May be used in spare parts for EEE placed on the market before 24 September 2010.
11(b)	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.
12	Lead as a coating material for the thermal conduction module C-ring.	May be used in spare parts for EEE placed on the market before 24 September 2010.
13(a)	Lead in white glasses used for optical applications.	Applies to all categories; expires on: -21 July 2023 for category 8 in vitro diagnostic medical devices; -21 July 2024 for category 9 industrial monitoring and control instruments and for category 11;
		-21 July 2021 for all other categories and subcategories.













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13(b)	Cadmium and lead in filter glasses and glasses	Applies to categories 8, 9 and 11; expires on:
	used for reflectance standards.	-21 July 2023 for category 8 in vitro diagnostic
		medical devices;
		-21 July 2024 for category 9 industrial monitoring
		and control instruments and for category 11;
		-21 July 2021 for other subcategories of categories
	0	8 and 9.
13(b)-	Lead in ion coloured optical filter glass types.	
(I)	Lead in foil coloured optical filter glass types.	
13(b)-	Cadmium in striking optical filter glass types;	
(II)	excluding applications falling under point 39 of	Applies to categories 1 to 7 and 10; expires on 21
	this Annex.	July 2021 for categories 1 to 7 and 10.
12(b)	(43) (43)	
13(b)-	Cadmium and lead in glazes used for reflectance	
(III)	standards.	
14	Lead in solders consisting of more than two	Expires on 1 January 2011 and after that date may
	elements for the connection between the pins	be used in spare parts for EEE placed on the
	and the package of microprocessors with a lead	market before 1 January 2011.
	content of more than 80 % and less than 85 %	
15	by weight. Lead in solders to complete a viable electrical	
13	connection between semiconductor die and	
	carrier within integrated circuit flip chip	
	packages.	
16	Lead in linear incandescent lamps with silicate	Expires on 1 September 2013.
	coated tubes.	
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 %	Expires on 1 January 2011.
	lead by weight or less) of discharge lamps when	
	used as speciality lamps for diazoprinting	
	reprography, lithography, insect traps,	
	photochemical and curing processes containing	
10/h)	phosphors such as SMS ((Sr,Ba) ₂ MgSi ₂ O ₇ :Pb).	
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).	(2)
19	Lead with PbBiSn-Hg and PbInSn-Hg in	Expires on 1 June 2011.
-/	specific compositions as main amalgam and	Zi-pato on round zorri
	with PbSn-Hg as auxiliary amalgam in very	
	compact energy saving lamps (ESL).	







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			1 4 6 1 5 61 16
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 glasses.		(S
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0, 65 mm and less.	May be used in spare parts for EEE placed on the market before 24 September 2010.	
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.		
26	Lead oxide in the glass envelope of black light blue lamps.	Expires on 1 June 2011.	(6)
27	Lead alloys as solder for transducers used in	Expired on 24 September 2010).
	high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers.	(FI)	
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC.		
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.		(S
31	Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting).	Cil	Cil
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.	(cti)	(cr
34	Lead in cermet-based trimmer potentiometer elements.		
36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display.	Expired on 1 July 2010.	(rii)
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.		(Å





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39	Cadmium in colour converting II-VI LEDs (<	Expires on 1 July 2014.	
	10 μg Cd per mm 2 of light-emitting area) for		
	use in solid state illumination or display	-0	_00%
182	systems.		12
40	Cadmium in photoresistors for analogue	Expires on 31 December 2013.	(0)
	optocouplers applied in professional audio		
	equipment.		
41	Lead in solders and termination finishes of	Expires on 31 December 2018.	
	electrical and electronic components and		
	finishes of printed circuit boards used in ignition	(67)	
	modules and other electrical and electronic		
	engine control systems,		
	which for technical reasons must be mounted		
12:	directly on or in the crankcase or cylinder of	C.S.	193
	hand-held combustion engines (classes SH:1,		(65)
	SH:2, SH:3 of Directive 97/68/EC of the		100
	European Parliament and of the Council.		

*** End of Report ***

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