

# TEST REPORT

Product:	LED Flashlight	
Brand Mark:	(i)	
	ХТАҢ	
Applicant:	Shenzhen Winner Bros Import & Export Co., Ltd.	
Address:	Rm 813, Moi Art Trading Plaza, No.245 Busha Rd Buji,	Longgang
	District, Shenzhen, Guangdong, China	
Manufacturer:	Shenzhen XTAR Electronics CO., Ltd	
Address:	5th Floor, No.77 Xinhe Rd., Shangmugu, Pinghu Area, L	onggang
	District, Shenzhen, Guangdong, China	
Model No:	D06	
Date of Sample Received:	2014-11-28	
Testing Period:	2014-11-29 to 2014-12-25	
Test Requested:		Conclusion:
(1): As specified by client, to de	etermine the Lead(Pb), Cadmium(Cd), Mercury(Hg),	Pass
Hexavalent Chromium(Cr6	+), Polybrominated Biphenyls(PBBs) & Polybrominated	
Diphenyl Ethers(PBDEs) c	ontent in the submitted sample in accordance with	
Regulation		
(2): As specified by client, to de	etermine the HBCDD content in the submitted samples	Pass
(3): As specified by client, to de	etermine the DEHP, DBP, BBP content in the submitted	Pass

Check by	:	July Yan 5	100dteCHNOLOGI
	-	(July Yan)	APPROVEDS
Approved by	:	sthan chen	Date 2014-12-26
		(Ethan Chen)	

Shenzhen STONE Testing Technology Co., Ltd. Address:East of F/4, Bldg. 11B, Area A, Tanglang Industrial Park, Taoyuan Street, Nanshan District, Shenzhen, Guangdong, China Tel: (86)-755-26582862 Fax: (86)-0755-61673854 Http: <u>www.stt-lab.org</u>



# Test Method:

#### (1)With reference to IEC 62321.

Testing item	Pretreatment method	Measuring	MDL	
		instrument		
Lead(Pb)	IEC 62321:2013	ICP-OES	2 mg/kg	
Cadmium(Cd)	IEC 62321:2013	ICP-OES	2 mg/kg	
Mercury(Hg)	IEC 62321:2013	ICP-OES	2 mg/kg	
Chromium(Cr VI)	IEC 62321:2008	UV-Vis	2 mg/kg	
PBBs/ PBDEs	IEC 62321:2008	GC-MS	5 mg/kg	

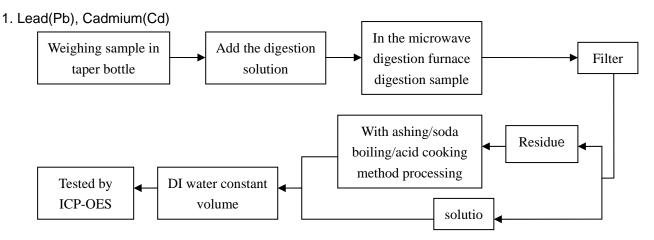
#### (2) With reference to EPA 3550C:2007

Testing item	Testing item Pretreatment method		MDL
HBCDD	EPA 3550C:2007	GC-MS	10 mg/kg

#### (3) With reference to EN 14372:2004

Ī	Testing item	Pretreatment method	Measuring instrument	MDL
	DEHP、DBP、BBP	EN 14372:2004	GC-MS	0.003 mg/kg

## Test Flow:



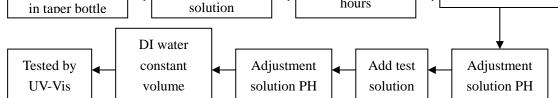
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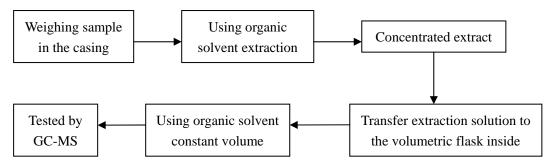
Filter

Residue

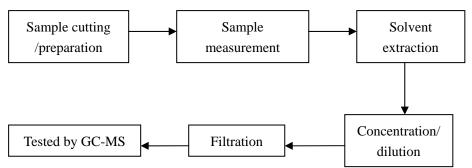
2. Mercury (Hg) In the microwave Add the digestion Weighing sample in digestion furnace solution microwave digestion sample With ashing/soda boiling/acid cooking method processing Tested by DI water constant **ICP-OES** volume solutio 3. Chromium(Cr VI) 90-95°C heating 3 Weighing sample Add the digestion Cooling, Filter hours solution



#### 4. PBBs/ PBDEs



#### 5. HBCDD/ DEHP/ BBP/ DBP



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## Test Results:

Testing Item	Unit	ROHS	Result					
		Limit	1	2	3	4	5	6
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Sum of PBBs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Monobromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Sum of PBDEs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Monobromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromocyclododecane	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
(HBCDD)								
Bis-(2-ethylhecyl) Phthalate	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
(DEHP)								
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

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Testing Item	Unit	ROHS	Result					
		Limit	7	8	9	10	11	12
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Sum of PBBs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Monobromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Sum of PBDEs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Monobromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromocyclododecane	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
(HBCDD)								
Bis-(2-ethylhecyl) Phthalate	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
(DEHP)								
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

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Sample Description:

- 1. Adapter
- 2. Car Charger
- 3. MC1 Charger
- 4. Enclosure of LED Flashlight (Black Metal)
- 5. Enclosure of LED Flashlight (Sliver Metal)
- 6. Glass of LED Flashlight
- 7. USB WIRE
- 8. PCB
- 9. IC
- 10. SMD
- 11. Internal Wire
- 12. LED

#### Notes:

1mg/kg=1ppm = 0.0001% N.D. = Not Detected (<MDL) MDL = Method Detection Limit /=Not Regulated ---=Not Applicable



# SAMPLE PHOTO



\*\*\*\*End of Report\*\*\*\*

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