



**BUREAU  
VERITAS**

# TEST REPORT

LAB NO. : (6617)221-0860  
DATE : August 14, 2017  
PAGE : 1 OF 3

Applicant:  
**SUNNY LOAN TOP CO.,LTD**  
NORTH BUILDING NO.158 XIHE STREET, NINGBO, CHINA

Date of Submission: August 9, 2017  
Test Period: August 9, 2017 to August 14, 2017  
BV EE Ref. No.: XYR-17AU08-01CTSP-A0

Sample Description:	Sample(s) received is(are) stated to be: Battery of Solar Flashlight		
Manufacturer:	SUNNY LOAN TOP CO.,LTD	Buyer:	SUNNY LOAN TOP CO.,LTD
Style No(s):	SJ-8214	PO No.:	/
Country of Origin:	/	Country of Destination:	Oversea Country

Test Item(s): Details see page 2

## SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION
Heavy Metals Content in Batteries and Accumulators and Waste Batteries and Accumulators – European Council Directive 2006/66/EC with Latest Amendment up to Directive 2013/56/EU	PASS

### REMARK

If there are questions or concerns on this report, please contact the following persons:

General enquiry and invoicing

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**BUREAU VERITAS  
CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)**

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Analytical Lab Manager



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**Sample Description Assigned by Laboratory:**

Test Item	Description
1	Button cell

Note:

g = gram(s)	% = percentage
mcg = microgram(s)	1 mg/kg = 0.0001%
mg/kg = milligram per kilogram	"<" = less than
mg/L = milligram per litre	">" = Greater than
g/kg = gram(s) per kilogram	Req. = Requirement
MDL = Method Detection Limit	"-" = Not Regulated
ND = Not Detected (< MDL)	NA = Not applicable
EX = Exempted	

**Photo of the Submitted Sample**





**TEST RESULT**

**Heavy Metals Content in Batteries and Accumulators and Waste Batteries and Accumulators –  
European Council Directive 2006/66/EC with Latest Amendment up to Directive 2013/56/EU**

Method: Sample was digested with acid mixture and then analyzed by Inductively Coupled Argon Plasma Spectrometer.

Parameter	Unit	Result	Maximum Allowable Limit
		1	
Total Lead (Pb)	% w/w	< 0.001	See comment if > 0.004 %
Total Cadmium (Cd)	% w/w	< 0.0005	0.002 %
Total Mercury (Hg)	% w/w	< 0.0001	0.0005 %
<b>Conclusion</b>	-	PASS	Please see comment for proper marking of the battery

Note: % w/w = percentage weight by weight

Comment:

1. Marking requirement:  
According to 2006/66/EC, all batteries, accumulators and battery packs shall be appropriately marked with the symbol as below:



Covered area on battery, accumulator or battery pack

- Cylindrical cells: at least 1.5 % of surface area (maximum 5 × 5 cm)
  - Others: at least 3 % of surface area of the largest side (maximum 5 × 5 cm)
  - When the size of the battery, accumulator or battery pack is such that the symbol would be smaller than 0.5 × 0.5 cm, a symbol at least 1 × 1 cm shall be printed on the packaging. Symbols shall be printed visibly, legibly and indelibly
2. When the sample consists lead exceeding 0.004%, the product is to be labeled with heavy metal content with the requirements as below:
    - Mark with the chemical symbol for the metal concerned: Pb
    - Print beneath the symbol
    - Cover an area of at least ¼ of the size of the symbol

END