

Company Logo

TEST REPORT

LAB NO. : (5508)024-1766
DATE : January 31, 2008
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APPLICANT :

CONTACT PERSON :

DATE OF SUBMISSION : January 24, 2008

TEST PERIOD : January 25, 2008 to January 31, 2008

NO. OF WORKING DAYS : 5

SAMPLE DESCRIPTION : ALKALINE BATTERY SIZE D
Model no.: LR20G
Country of origin: JAPAN

SUMMARY OF TEST RESULTS

TEST REQUESTED	PASS	FAIL	REMARK
Heavy Metals Content in Batteries and Accumulators and Waste Batteries and Accumulators – Portable Batteries or Accumulators Except Button Cells – European Council Directive 2006/66/EC	X		
Heavy Metals Content in Batteries and Accumulators – Batteries and Accumulators Except Button Cells – European Council Directive 91/157/EEC and Commission Directive 98/101/EC	X		

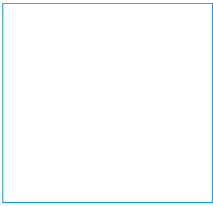
REMARK

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

PREPARED BY: _____

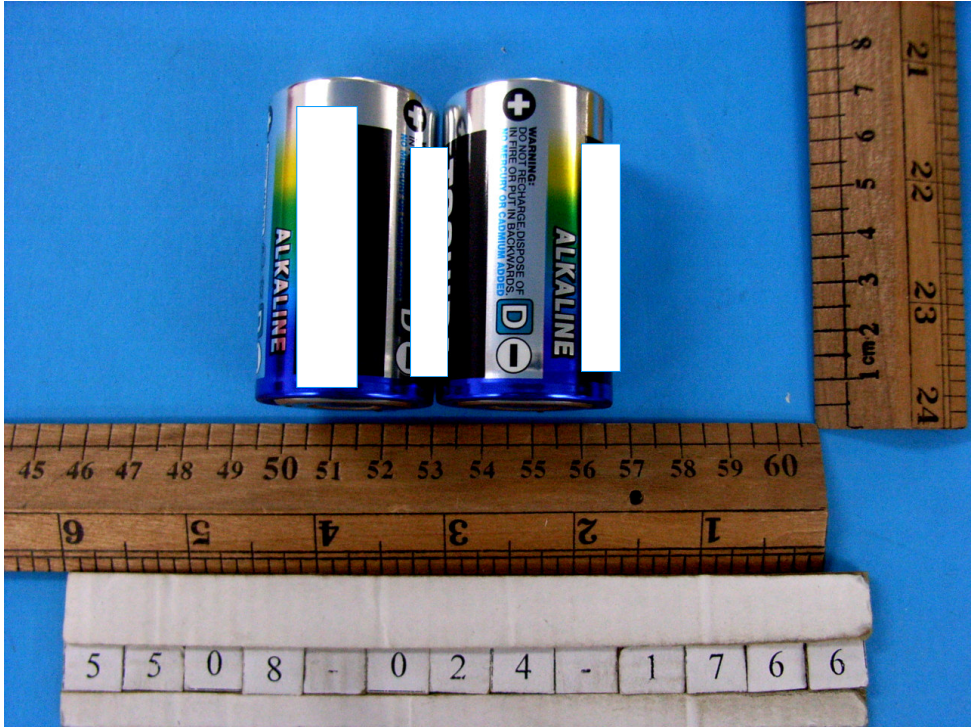
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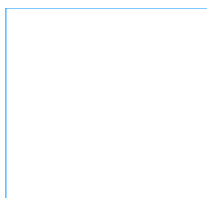
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Photo of the Submitted Sample





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TEST RESULT

I. Heavy Metals Content in Batteries and Accumulators and Waste Batteries and Accumulators – Portable Batteries or Accumulators Except Button Cells – European Council Directive 2006/66/EC

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 %
Conclusion	-	PASS	Please see comment for proper marking of the battery

Test Item 1: Alkaline battery size D

Note: % w/w = percentage weight by weight
 “<” = less than
 “>” = more than

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

Comment:

1. Marking requirement:

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



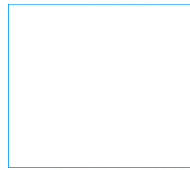
Covered area on battery, accumulator or battery pack

- Cylindrical cells: 1.5 % of surface area (maximum 5 × 5 cm)
- Others: 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: Hg, Cd or Pb
- Print beneath the symbol
- Cover an area of at least ¼ of the size of the symbol

Remark: 2006/66/EC will be effective on September 26, 2008.



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TEST RESULT

**II. Heavy Metals Content in Batteries and Accumulators – Batteries and Accumulators
Except Button Cells – European Council Directive 91/157/EEC and Commission Directive
98/101/EC**

Parameter	Unit	Result	Maximum Allowable Limit
		1	
Total Lead (Pb)	% w/w	< 0.005	Marking needed if > 0.4 %
Total Cadmium (Cd)	% w/w	< 0.001	Marking needed if > 0.025 %
Total Mercury (Hg)	% w/w	< 0.0001	0.0005 %
Conclusion	-	PASS	Please see comment for proper marking of the battery

Test Item 1: Alkaline battery size D

Note: % w/w = percentage weight by weight
“<” = less than
“>” = more than

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

Comment: When the sample consists of cadmium exceeding 0.025% or lead 0.4%, according to the European Council Directive 91/157/EEC and amendments, the product shall be marked in the appropriate manner with reference to the requirements of the European Council Directive 93/86/EEC to indicate the following points:

- separate collection,
- where appropriate, recycling,
- the heavy-metal content.

END