

Test Report

No. NGBEC1700004101

Date: 09 Jan 2017

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The following sample(s) was/were submitted and identified on behalf of the clients as : ZINC-MANGANESE BATTERY

SGS Job No. : NP16-005278 - NB
 Model No. : R03
 Client Ref. Information : R6/R14/R20
 Main Substance : Zn, MnO2
 Date of Sample Received : 03 Jan 2017
 Testing Period : 03 Jan 2017 - 09 Jan 2017
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).

Result Summary :

Test Requested	Conclusion
Directive 2006/66/EC and its Article 4 amendment of Directive 2013/56/EU- Heavy Metals Content in Batteries and Accumulators	PASS See Note(2)

Signed for and on behalf of
 SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch

Iris Xiao

Iris Xiao
 Approved Signatory



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 Ningbo Branch Chemical Laboratory

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	NGB17-000041.001	Silvery battery

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

Directive 2006/66/EC and its Article 4 amendment of Directive 2013/56/EU– Heavy Metals Content in Batteries and Accumulators

Test Method : Acid digestion method, analysis was performed by ICP-OES.

Test Item(s)	Limit	Unit	MDL	001
Lead (Pb)	-	%	0.001	0.0380
Cadmium (Cd)	0.002	%	0.001	ND
Mercury (Hg)	0.0005	%	0.0001	ND
Conclusion	PASS			

Notes :

- (1) Results shown are of total weight of the battery sample.
- (2) According to the directive 2006/66/EC and its Article 4 amendment of Directive 2013/56/EU, all types of battery shall include the chemical symbol Lead when containing more than 0.004% of Pb.



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Ningbo Branch Chemical Laboratory

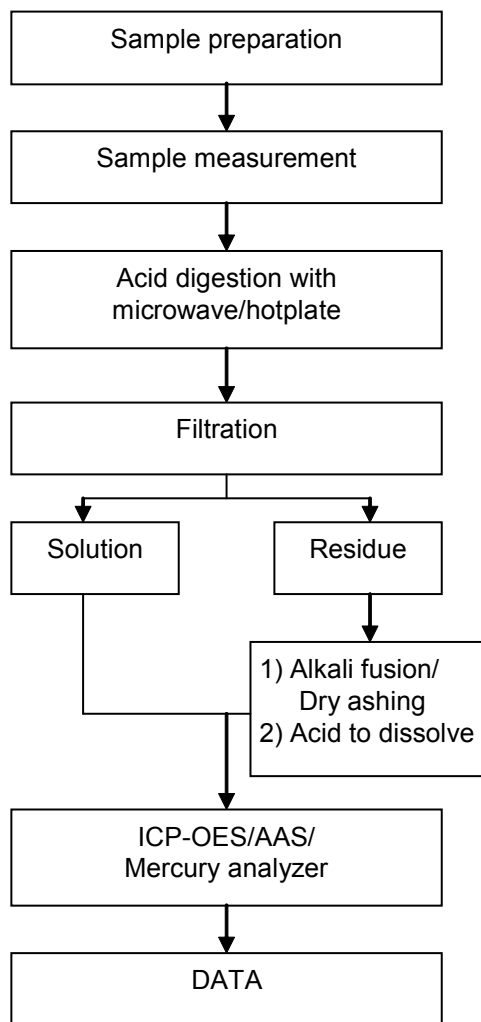
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ATTACHMENTS

Battery Testing Flow Chart



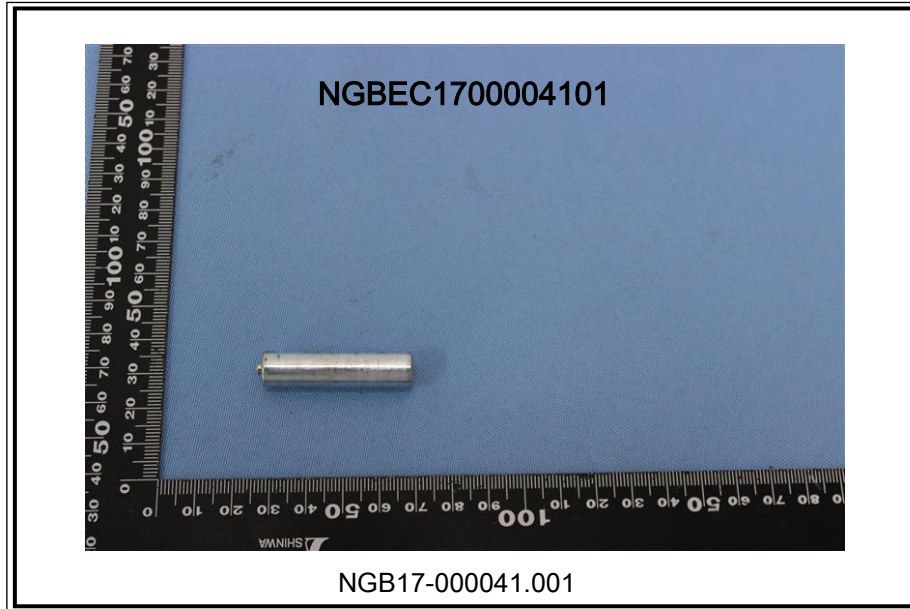
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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



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