



TEST REPORT

Report No.: STR16026033R

Date: 2016-03-02

Page 1 of 4

Applicant : Wuhan Forte Battery Co., Ltd

Applicant Address : Wujiashan Taiwan Businessmen Investment Zone, Wuhan, Hubei, China

The following sample was submitted by the client as:

Manufacturer : Wuhan Forte Battery Co., Ltd

Address : Wujiashan Taiwan Businessmen Investment Zone, Wuhan, Hubei, China

Sample Description : 3V lithium battery

Style/Item No. : CR123A, CR17335, CR14250, CR14335, CR14505, CR15270, CR17450, CR17505, CR18505, CR2, CR2016, CR1212, CR1216, CR2430, CR2450, CR2025, CR2032, CR3032, CR9V, CR-P2, 2CR5, CRV3, CR11188(Cr1/3N), CR34615B, CR26500, CR34615

Brand Name : FORTE

Sample Receiving Date : Feb. 27, 2016

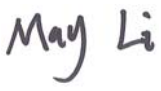

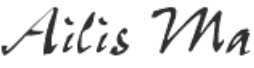
Test Period : Feb. 27, 2016 to Mar. 02, 2016

Test Requested:

As requested by the applicant, test(s) was/were performed as below:

Test Summary	Conclusion
1 European Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (XRF screening and chemical confirm)	PASS

Test Results: Please refer to following page(s).

Tested by:  May li	Reviewed by:  Boly Peng	Approved by:  Ailis Ma
--	---	--

Declaration:

- (1) The report shall not be reproduced partly without the written approval of the laboratory, except in full produced.
- (2) All the results shown in the report apply to the tested sample, any erasion on the report is invalid
- (3) All tested sample will be kept for one month, if there is any doubt about the test result, please inform within this period

Shenzhen SEM.Test Technology Co., Ltd.

1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C. (518101)



TEST REPORT

Report No.: STR16026033R

Date: 2016-03-02

Page 2 of 4

RoHS hazardous substances test

Test method:

IEC 62321-3-1:2013, XRF screening

IEC 62321-4-2013 for Hg, analyzed by ICP-OES

IEC 62321-5-2013 for Cd and Pb, analyzed by ICP-OES

IEC 62321:2008 Annex C and/or IEC 62321-7-1:2015 for Cr⁶⁺, analyzed by UV-VIS

IEC 62321-6-2015 for PBBs and PBDEs, analyzed by GC-MS

1. XRF results:

No.	Name of the sample	Part name	Sample Description	Results				
				Pb	Cd	Hg	Cr	Br
1-1-1	3V lithium battery	Aluminum case	Silver piece	BL	BL	BL	BL	NA
1-2-1		Positive pole	Positive contact	BL	BL	BL	IN	NA
1-2-2			White gasket	BL	BL	BL	BL	BL
1-2-3			Positive material	BL	BL	BL	BL	BL
1-3-1		Negative pole	Negative contact	BL	BL	BL	BL	NA
1-3-2			Negative material	BL	BL	BL	BL	BL
1-4-1		Gasket	Black plastic	BL	BL	BL	BL	BL
1-5-1		Cover	Plastic sheet with printings	BL	BL	BL	BL	BL

2. Chemical confirm results:

Test Item(s)	Result (mg/kg)					Limit (mg/kg)
	1-2-1	---	---	---	---	
Hexavalent Chromium (Cr ⁶⁺)	Negative	Negative	Negative	Negative	Negative	--
Comment	PASS	PASS	PASS	PASS	PASS	--

Remark:

1. BL = below limit
2. OL = over limit
3. IN = inconclusive, chemical confirm test is recommended
4. NA = not applicable
5. mg/kg = milligram per kilogram = ppm
6. Method Detection Limit (MDL) :10mg/kg for Pb, Cd, Hg and Cr⁶⁺; 10mg/kg for PBB and PBDE
7. ND = not detected
8. Negative = The Cr⁶⁺ concentration is below the limit of quantification. The coating is considered a non-Cr⁶⁺ based coating.
9. Positive = The Cr⁶⁺ concentration is above the limit of quantification and the statistical margin of error, The sample coating is considered to contain Cr⁶⁺.



TEST REPORT

Report No.: STR16026033R

Date: 2016-03-02

Page 3 of 4

Note:

1. When perform screening tests, it is the result on total Br while test item on restricted substances is PBBs/PBDEs, it is the result on total Cr while test item on restricted substances is Cr⁶⁺.
2. Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-VIS (for Cr⁶⁺) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration falls into the inconclusive area according to IEC 62321-3-1:2013 (unit: mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	---	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

3. The XRF screening test for RoHS elements. The reading may be different to the actual content in the sample be of non-uniformity composition.

TEST REPORT

Report No.: STR16026033R

Date: 2016-03-02

Page 4 of 4

Tested sample photo:



--- End of Report ---