



The Safety Company

UN 38.3 TEST SUMMARY REPORT

MSA Corporate Center

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October 24, 2019

Associated MSA Product(s): MSA Altair® Single Gas Detectors

The attached test summary report has been prepared in accordance with *The UN Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria, Amendment to the 6th Edition, Section 38.3.5 – Lithium cell or battery test summary*. The attached summary indicates the successful completion of tests as required in the UN Manual of Tests and Criteria for the lithium metal cell used in the MSA **Altair® Single Gas Detectors**. The attached summary applies to all MSA Altair® Single Gas Detector lithium ion batteries.

The original test summary was provided by the cell manufacturer. A formal request for the original test data shall be made through the manufacturer of the cell.

Sincerely,

A handwritten signature in black ink, appearing to read 'D F Vogt'.

David F. Vogt

Global Environmental Program Manager



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UN 38.3 TEST SUMMARY REPORT

Lithium Cell or Battery Test Summary in Accordance with Section 2.9.4 UN Model Regulations and Sub-section 38.3 of the UN Manual of Tests and Criteria, Part III, Sub-section 38.3.5.

[a] Manufacturer
EEMB CO., LTD.

[b] Manufacturer Contact Information
Unit 12-13/F, Delta House
3 on Yin Street
Sha Tin, Hong Kong
T: 852-58082720
www.eemb.com

[c] Test Laboratory
GTIHEA

204 Xingang West Road
Guangzhou 510300 P.R. China
T: 0086-20-84462287
www.gtihea.com

[d] Test Report ID# UN06-001

[e] Test Report Date 2006.07.25

[f] Description: Small lithium metal cell, 3.6 V, 2100 mAh utilized in the following MSA products: MSA Altair® Single Gas Detectors

Lithium Ion Lithium Metal

Mass (g)	18.0 g	Watt-hour Rating	7.56	Lithium Content	0.6 g
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Part Number(s) 10068082 – Battery, LI, 2/3A, Bobbin Cell (EEMB p/n ER17335-FT)

[g] List of Test Conducted **Result (Pass / Fail / N/A)**

38.3.4.1 T.1: Altitude simulation	Pass
38.3.4.2 T.2: Thermal test	Pass
38.3.4.3 T.3: Vibration	Pass
38.3.4.4 T.4: Shock	Pass
38.3.4.5 T.5: External short circuit	Pass
38.3.4.6 T.6: Impact/Crush (cell only)	Pass
38.3.4.7 T.7: Overcharge (packs only)	N/A
38.3.4.8 T.8: Forced discharge (cell only)	Pass

[h] Battery Assembly: Not Applicable UN38.3.3 (f) UN38.3.3 (g)

[i] Test Reference: Manual of Tests and Criteria Amendments, 3rd Edition, Section 38.3

[j] Signatory – Global Environmental Health and Safety

Date: October 24, 2019

Name: David F. Vogt

Title: Global Environmental Program Manager

Signature:

Notice – The above signatories affirm that this UN 38.3 Test Summary Report is an accurate and correct summary of the original tests. The original test data is confidential information available to competent Authorities with valid identification and only upon the review by MSA of a written formal request. Disclosure of original test data may be subject to the execution of a nondisclosure agreement.