



The Safety Company

## UN 38.3 TEST SUMMARY REPORT

### MSA Corporate Center

1000 Cranberry Woods Drive  
Cranberry Township, PA 16066  
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www.MSAnet.com

October 28, 2019

### **Associated MSA Product(s): MSA Responder® PAPR**

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 6<sup>th</sup> 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 **Responder® PAPR**. The attached summary applies to all MSA Responder® PAPR 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

# 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, subsection 38.3.5

[a]  Cell  Battery  Product  
 Tested Type Part #: 37260231  
 Same Type Part #: 37260226

[d] Unique report ID: 111

[e] Report date: 2002.05.14

[b] **Manufacturer**  
 Saft Civil Electronics Division  
 Saft America Inc.  
 313 Crescent St., Valdese, NC 28690  
 USA  
 T: 828-874-4111  
[lithium-sales@saftbatteries.com](mailto:lithium-sales@saftbatteries.com)  
<https://www.saftbatteries.com/>

[c] **Test Laboratory**  
 Saft Civil Electronics Division  
 Saft America Inc.  
 313 Crescent St., Valdese, NC 28690  
 USA  
 T: 828-874-4111  
[lithium-sales@saftbatteries.com](mailto:lithium-sales@saftbatteries.com)  
<https://www.saftbatteries.com/>

Same Type Part Numbers # (all): 37260214 37260217 37260226 37260227 37260228 37260229  
 37260230 37260232 37260234 37260235 37260236 37260237 37260238 37260217  
 SR181581 ACR:A3-06-2098 Nexergy:10041554 Nexergy:816911

[f] (i)  Li-ion  Li-metal.

(iv) **Description:** BA-5800  
 Primary (non-rechargeable) Lithium-Sulphur Dioxide (Li-SO<sub>2</sub>) 2S1P battery. 6.0 Volt, 7.8 Ah.

(ii) Mass: 327g.

(iii)  Watt hour rating or  Lithium content: 4.8g.

(v)  Cell  Battery  Product. Model number/Part number: 37260231

[g] List of Tests Conducted	Result (Pass / Fail / N.A.)	Test record reference
38.3.4.1 T.1: Altitude simulation	Pass	5624
38.3.4.2 T.2: Thermal test	Pass	5624
38.3.4.3 T.3: Vibration	Pass	5624
38.3.4.4 T.4: Shock	Pass	5624
38.3.4.5 T.5: External short circuit	Pass	5624
38.3.4.6 T.6: Impact/Crush (cell only test)	Pass	5609
38.3.4.7 T.7: Overcharge (N.A for Li-metal only)	N.A.	N.A.
38.3.4.8 T.8: Forced discharge (cell only test)	Pass	5609

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

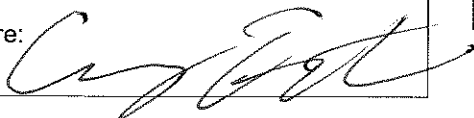
[i] Test Reference: UN Manual of Tests and Criteria, Part III, sub-section 38.3. *Third revised edition 2001*

[j] Signatory A. Date: 2018.12.27

Name: Casey Fortune

Title: Test Lab Manager

Signature:

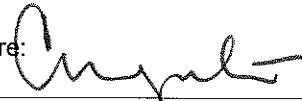



[j] Signatory B. Date: 2018.12.27

Name: Carlos Negrete

Title: Engineering Manager

Signature:



**Important!** The above signatory / signatories affirm that this document is a true and correct summary of the original individual tests and test data. The original test data is confidential information available to competent State Authorities with valid identification and only upon their formal request. Disclosure of the original test data to any other entity upon its request will be considered by Saft and, should Saft consider this request is with merit, may be subject to the prior execution of a nondisclosure agreement.