

# 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** 03577R  
 **Same Type Part #** see list

[d] Unique report ID: LSH20 12-2018-3

[e] Report date: 2015.12.08

[b] **Manufacturer**  
 Saft Civil Electronics Division  
 Saft SAS  
 Rue Georges Leclanché, BP1039  
 86000 Poitiers  
 T. +33 (0) 5. 49 55 48.48  
 Lithiumsales.fr@saftbatteries.com  
 https://www.saftbatteries.com

[c] **Test Laboratory**  
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**Same Type Part Numbers # (all):** 03576N, 03749V, 04084Z, 04488N, 04659S, 05041T, 05226L, 05251M, 05339D, 05367H, 05496S, 05508E, 05564N, 05978U, 06039H, 06064J, 06085F, 06206G, 06231H, 06279H, 06317X, 06328J, 06489B, 60086Q  
 Same P/N beginning by 59-xxxxx (e.g: 59-03576N) are of the same tested type

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

(iv) **Description:** Primary D-sized spiral cell with a 5A protection fuse

(ii) Mass: 96 g

(iii)  Watt hour rating or  Lithium content: 3.84 g.

(v)  Cell  Battery  Product. Model number/Part number: LSH20

**[g] List of Tests Conducted**

**Result (Pass / Fail / N.A.)**

**Test record reference**

| [g] List of Tests Conducted                      | Result (Pass / Fail / N.A.) | Test record reference |
|--|-----------------------------|-----------------------|
| 38.3.4.1 T.1: Altitude simulation                | Pass                        | T0340-14              |
| 38.3.4.2 T.2: Thermal test                       | Pass                        | T0340-14              |
| 38.3.4.3 T.3: Vibration                          | Pass                        | T0340-14              |
| 38.3.4.4 T.4: Shock                              | Pass                        | T0340-14              |
| 38.3.4.5 T.5: External short circuit             | Pass                        | T0340-14              |
| 38.3.4.6 T.6: Impact/Crush (cell only test)      | Pass                        | T0340-14              |
| 38.3.4.7 T.7: Overcharge (N.A for Li-metal only) | NA                          | NA                    |
| 38.3.4.8 T.8: Forced discharge (cell only test)  | Pass                        | T0340-14              |

[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 ST/SG/AC.10/11/Rev.5

[j] Signatory A. Date: 2019.06.27

Name: Cristophe Serre

Title: Quality Mgr – C.E. Div- Poitiers site

Signature:

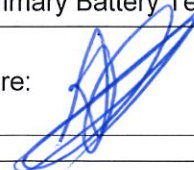



[j] Signatory B. Date: 2019.06.27

Name: Antoine Derouet

Title: Primary Battery Technical 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.