# LITHIUM CELL TEST SUMMARY AND SUPPLIER INQUIRY

IN ACCORDANCE WITH SUB-SECTION 38.3 OF MANUAL OF TESTS AND CRITERIA

| Name/Description of cell |
|---|
| |

**Manufacturer of cell**

| | |
|---|---|
| Name | Dongguan HuanYuYuan Technology Co., Ltd. |
| Address | Room 101, No.7 of Banhubei 5th Street, HuangJiang Town, Dongguan GuangDong China |
| Phone | 0769-83531866 |
| E-Mail | 1260350392@qq.com |
| Website | www.hyybattery.net |

**Manufacturer of the equipment (if the cell is contained in equipment)**

| | |
|---|---|
| Name | Technaxx Deutschland GmbH & Co. KG |
| Address | Kruppstraße 105, 60388 Frankfurt am Main |
| Phone | +49 [69] 90 47552 0 |
| E-Mail | Zentrale@technaxx.de |
| Website | www.technaxx.de |

**Test laboratory of cell**

| | |
|---|---|
| **Name** | **Shenzhen Lionaces Technology Co., Ltd.** |
| Address | 307-310, Block 1A, Zhida Industrial Park,No.4 Longping West Road, Longcheng<br>Street, Longgang District, Shenzhen, Guangdong,China |
| Phone | 0755-28280690 |
| E-Mail | service@lionaces.com |
| Website | www.lionaces.com |

**ID-number and date**

| | |
|---|---|
| Unique test report identification number | LA2019B0447001U |
| Date of test report | 2020-01-09 |

**DESCRIPTION OF CELL ( Mark with an"X")**

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|---|---|
| **Lithium ion cell** | X |
| Lithium metal cell | |

**Parameters**

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|---|---|
| **Mass in gram (g):** | **15.9g** |
| **Lithium ion:** Indicate watt-hour rating (Wh): | 3.7v |
| **Lithium metal:** Indicate lithium metal content in gram (g): | |

**Physical description of cell**

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**Model numbers**

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## TESTS AND RESULTS

| **List of tests conducted and results**<br>**- Mark N/A, pass or fail with an ''X''** | **N/A** | **Pass** | **Fail** |
|---|---|---|---|
| T1 - Altitude simulation | | X | |
| T2 - Thermal Test | | X | |
| T3 – Vibration | | X | |
| T4 – Shock | | X | |
| T5 - External Short Circuit | | X | |
| T6 - Impact - for cylindrical cells having a diameter of at least 18 mm | | X | |
| T6 - Crush - for prismatic cells, pouch cells, button cells and cylindrical cells<br>having a diameter of less than 18 mm | | X | |
| T7 – Overcharge | | X | |
| T8 - Forced Discharge | | X | |

**Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto**

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## ADDITIONAL SUPPLIER INQUIRY

| **Mark Yes or no with an ''X''** | **Yes** | **No** |
|---|---|---|
| **Quality management system for manufacturing cells**<br>Does the manufacturer of the cell/battery manufacture the products based on a<br>documented quality management system according to transport regulations? | X | |
| **Are the following parameters exceeded?**<br>Lithium ion cell: more than 20 Wh<br>Lithium metal cell: more than 1 g Lithium | X | |

**Check point 13 – 15 need to be answered when 12 has been ticked "YES":**

| Mark Yes or no with an ''X'' | **Yes** | **No** |
|---|---|---|
| Does each cell incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions of carriage? | X | |
| Is each cell equipped with an effective means of preventing external short circuits? | X | |
| Is each battery containing cells or series of cells connected in parallel | X | |

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|---|---|
| equipped with effective means as necessary to prevent dangerous reverse current flow (e.g. diodes, fuses, etc.) **Not relevant for cells** | |

**Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells and lithium polymer cells**

| | | |
|---|---|---|
| State of Charge (SoC) max. 30 % | X | |

**CELLS INSTALLED IN EQUIPMENT**

| Check point 17 needs to be answered when the cells are installed in articles: Mark N/A, pass or fail with an ''X'' | N/A | Pass | Fail |
|---|---|---|---|
| 17c) Only button cells enclosed? | | X | |
| 17b) Number of enclosed cells (other than button cells) per equipment | | | |
| | | | |
| When the equipment is intentionally active/switched on during transport e.g. data loggers: | | | |
| 17c) Confirmation that no dangerous amount of heat is emitted from the equipment | | X | |
| 17d)Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160 | | X | |

| Place, Date | Pascal Pekcan | Company stamp |
|---|---|---|
| 2020-07-01 |  | Technaxx Deutschland GmbH & Co. KG<br>Kruppstr. 105<br>60388 Frankfurt a.M.<br>Fon +49(0)69/90 47 55 2-0 · Fax -16 |