## LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

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

N/A = Not Applicable

| 1. Name of cell / battery   |  |  |                    |                                  |  |  |
|---|--|--|--------------------|----------------------------------|--|--|
| Polymer Li Battery 601419   |  |  |                    |                                  |  |  |
| 2. Manufacturer of cell / ba  | attery   | the transfer of the second |                    | MAACUUMPAANUUMPAANUAMININ MAARAA | <del>1010/21110</del> /2017/2017/2017/2017/2017/2017/2017/2017 | A STATE OF THE SAME OF THE SAM |
| Name Tangh  | e county Ho  | ongyi new Mate   | erials Co Ltd      |                                  |  |  |
| Address   |  |  |                    |                                  |  |  |
| Phone   |  |  |                    |                                  |  |  |
| Email   |  |  |                    |                                  |  |  |
| Website   |  |  |                    |                                  |  |  |
| 3. Test laboratory of cell /  | battery  |  |                    |                                  |  |  |
|   |  | Calibration and  | Testing Co.        | Ltd                              |  |  |
| Address   | English that the second and the second control of the second seco |  |                    |                                  |  |  |
| Phone   |  |  |                    |                                  |  |  |
| Email   |  |  |                    |                                  |  |  |
| Website   |  |  |                    |                                  |  |  |
| 4. ID-number and date  Unique test report identification number 20190104936ZB-BR01 Date of test |  |  | Date of test r     | report 2019/02/15                |  |  |
| DESCRIPTION OF CELL / BATTERY   |  |  |                    |                                  |  |  |
| 5. Mark the type of cell/battery with an "•"  Lithium ion cell  Lithium metal cell              |  |  |                    |                                  | motal call   |  |
| Lithium ion cell  (X) Lithium ion battery   |  |  |                    | thium metal battery              |  |  |
| Lithium hybrid battery  |  |  |                    |                                  | at battery O   |  |
| Littlion rigbrid back   | ,, 9   |  |                    |                                  |  |  |
| 6. Parameters   |  |  | Cell               | Battery                          |  |  |
| Mass in gram (g):   |  |  |                    | 3,2                              |  |  |
| Lithium ion: Indicate watt-hour rating (Wh):  |  |  |                    | 0,33                             |  |  |
| Lithium metal: Indicate lith  | ium metal cont   | ent in gram (g):   |                    |                                  |  |  |
| Lithium hybrid: Indicate lith   | nium metal con   | tent in gram (g) and   | d watt-hour rating | g (Wh <b>)</b> :                 |  | g<br>Wh  |



### LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

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

Name of cell/battery (taken from field 1)

Polymer lithium ion Battery

| 7. Physical description of cell / battery   |            | ***************************************   |                    |  |
|---|------------|---|--------------------|--|
| prismatic   |            |   |                    |  |
|   |            |   |                    |  |
| 8. Model numbers  |            |   |                    |  |
| 23955 Sky Arrow   |            |   |                    |  |
|   |            |   |                    |  |
|   |            |   |                    |  |
|   |            |   |                    |  |
| TECTS AND DECLITS   |            |   |                    |  |
| TESTS AND RESULTS   | _          | pr. 1111-1111-1111-1111-1111-1111-1111-11 | ·                  |  |
| 9. List of tests conducted and results - Mark N/A, pass or fail with an "•"       | N/A        | pass                                      | fail               |  |
| T1 - Altitude simulation  | O          | O   | O                  |  |
| T2 - Thermal Test   | 0          | O   |                    |  |
| T3 - Vibration  | 0          |   |                    |  |
| T4 - Shock  | 0          |   |                    |  |
| T5 - External Short Circuit   |            |   |                    |  |
| T6 - Impact / Crush   |            |   |                    |  |
| T7 - Overcharge   | 0          |   |                    |  |
| T8 - Forced Discharge   | 0          | O   | O                  |  |
| for all above   | O          | X   | Ŏ                  |  |
|   | O          | Ŏ   | O                  |  |
|   |            |   |                    |  |
| 10. Reference to assembled battery testing requirements                           |            |   |                    |  |
|   |            |   |                    |  |
|   |            |   | N/A                |  |
|   |            |   | CONT BESTER DURANT |  |
|   |            |   |                    |  |
|   |            |   |                    |  |
| 11. Reference to the revised edition of the Manual of Tests and Criteria used and | to amendme | nts thereto                               |                    |  |
|   |            |   |                    |  |
|   |            |   | (S) SATISFIES      |  |

# LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

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

Name of cell/battery (taken from field 1)

Polymer lithium ion Battery

#### ADDITIONAL SUPPLIER INQUIRY

| Does the manufacturer of the cell/battery manufacture the products based on a documented quality management system according to transport regulations?  |   |                   | NO       |
|---|---|-------------------|----------|
|   |   |                   | <u> </u> |
| 13. Are the following parameters exceeded?  Lithium ion cell: more than 20 Wh  Lithium ion battery: more than 100 Wh  Lithium metal cell: more than 1 g Lithium  Lithium metal battery: more than 2 g Lithium  Lithium hybrid Battery: more than 1,5 g Lithium and/or more than 10 Wh |   | YES               | NOX      |
|   |   |                   |          |
| Check point 14 – 16 need to be answered when 13 has been ticked "YES":  |   |                   |          |
| 14. Does each cell / battery incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions of carriage?   |   | YES               | NO       |
| <b>15.</b> Is each cell / battery equipped with an effective means of preventing external short circuits?   | 0 | YES               | NO O     |
| 16. Is each battery containing cells or series of cells connected in parallel equipped with effective means as necessary to prevent dangerous reverse current flow (e.g. diodes, fuses, etc.)?  |   | YES               | NO       |
|   |   | · · · · · · · · · |          |
| <ol> <li>Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells/batteries<br/>and lithium polymer cells/batteries</li> </ol>  |   |                   |          |
| State of Charge (SoC) max. 30 %   |   | YES               | NO O     |
|   |   |                   |          |

### CELLS/BATTERIES INSTALLED IN EQUIPMENT

| 18. Check point 18 needs to be answered when the cells / batteries are installed in articles:  |   |  |  |    |       |   |
|--|---|--|--|----|-------|---|
| 18.a) Only button cells enclosed?  |   |  |  |    | NO (X | 0 |
| 18.b) Number of enclosed cells (other than button cells)/batteries per equipment   |   |  |  |    |       |   |
|  | Enclosed cells per equipment Enclosed batteries per equipment |  |  | 1  |       |   |
| When the equipment is intentionally active/switched on during transport e.g. data loggers:   |   |  |  |    |       |   |
| 18.c) Confirmation that no dangerous amount of heat is emitted from the equipment X N/A YES NO   |   |  |  |    |       |   |
| 18.d) Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160 X N/A YES |   |  |  | NO |       |   |

| 19. Place, Date   | 20. Title, Surname, First name                               | 21. Company stamp and signature |  |  |  |
|-------------------|--|---------------------------------|--|--|--|
| Bünde, 2019.11.26 | Vieregge Thomas<br>Head of Quality Assurance & Product Safty | PRAVEIL GMDI                    |  |  |  |

32257 8/6/de Tel.: (+43/0) 5223 965-0

