

**Battery Test Summary
 Subsection 38.3
 Tests and Criteria
 - Milwaukee -**




1. Cell, Battery or Product manufacture

Techtronic Industries GmbH
 Max-Eyth-Straße 10
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 Germany

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2. Battery Transportation Information

| Model Type | Item description | Battery mass (kg) | Wh rating | Test report # | Test report date |
|---------------------------|---------------------|---------------------------|-----------|------------------|------------------|
| M28BX | Lithium-Ion battery | 0,999 | 84 | RZUN2016-3430 | 23.04.2017 |
| M28B5 | Lithium-Ion battery | 1,037 | 140 | RZUN2017-1458 | 18.07.2017 |
| C18B, M18B | Lithium-Ion battery | 0,492, 0,411 | 27 | RZUN2018-1346 | 07.05.2018 |
| M18B2 | Lithium-Ion battery | 0,428 | 36 | RZUN2017-2129 | 13.12.2017 |
| C18B, M18BX, MV18BX | Lithium-Ion battery | 0,492, 0,717, 0,813 | 54 | RZUN2018-1345 | 22.05.2018 |
| M18HB3 | Lithium-Ion battery | 0,609 | 54 | RZUN2019-0515 | 29.01.2019 |
| M18B4 | Lithium-Ion battery | 0,715 | 72 | RZUN2019-2403 | 03.07.2019 |
| M18B5 | Lithium-Ion battery | 0,726 | 90 | RZUN2017-0558-M1 | 28.11.2018 |
| M18HB5.5 | Lithium-Ion battery | 1,100 | 99 | RZUN2018-3408 | 20.12.2018 |
| M18B6 | Lithium-Ion battery | 0,752 | 108 | RZUN2018-1420 | 18.06.2018 |
| M18HB8 | Lithium-Ion battery | 1,086 | 144 | RZUN2018-3407 | 06.01.2019 |
| M18B9 | Lithium-Ion battery | 1,088 | 162 | RZUN2018-1422 | 18.06.2018 |
| M18HB12 | Lithium-Ion battery | 1,531 | 216 | RZUN2017-2358 | 04.02.2018 |
| C14B, M14B | Lithium-Ion battery | 0,347, 0,345 | 22 | RZUN2016-3423 | 06.04.2017 |
| C14BX, M14BX | Lithium-Ion battery | 0,621, 0,578 | 44 | RZUN2016-3415 | 26.03.2017 |
| C12B, M12B | Lithium-Ion battery | 0,200, 0,179 | 18 | RZUN2018-1402 | 12.07.2018 |
| M12B2 | Lithium-Ion battery | 0,187 | 24 | RZUN2018-1729 | 12.07.2018 |
| M12B3 | Lithium-Ion battery | 0,190 | 36 | RZUN2018-1419 | 18.06.2018 |
| C12BX, M12BX | Lithium-Ion battery | 0,405 | 36 | RZUN2016-3422 | 28.03.2017 |
| M12B4 | Lithium-Ion battery | 0,416 | 48 | RZUN2017-2132 | 21.12.2017 |
| M12B6 | Lithium-Ion battery | 0,423 | 72 | RZUN2018-1418 | 18.06.2018 |
| M4B2 | Lithium-Ion battery | 0,070 | 8 | RZUN2017-2130 | 13.12.2017 |
| L4B2 | Lithium-Ion battery | 0,070 | 10 | RZUN2017-2089 | 1.11.2017 |

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| TTI-EMEA Techtronic Industries GmbH Max-Eyth-Straße 10 71364 Winnenden, Germany Revision: 11 Nov 2019 Rev. No.: 1.3 | Battery Test Summary Subsection 38.3 Tests and Criteria - Milwaukee - |  |
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| <u>Description of cell or battery:</u> Battery used in consumer power tools | | |
| Reference to assembled battery testing, if applicable: not applicable | Reference to the revised edition of the Manual of Tests and Criteria used and to amendments, if any: Revision 6, Amendment 1 | <u>For air transport only</u> Does the cell or battery comply with the 30% state of charge? Yes |

3. Test summary

| Contact information test laboratory | Performed Tests | | |
|-------------------------------------|---|------------------------|---------------------|
| | Vkan Certification & Testing Co. Ltd Address: No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou P. R. China. Tel.: 020 32293888 Fax: 020 32293889 E-Mail: office@cvc.org.cn Web: http://www.cvc.org.cn | 38.3.4.1 --- T1 | Altitude Simulation |
| 38.3.4.2 --- T2 | | Thermal Test | Pass |
| 38.3.4.3 --- T3 | | Vibration | Pass |
| 38.3.4.4 --- T4 | | Shock | Pass |
| 38.3.4.5 --- T5 | | External Short Circuit | Pass |
| 38.3.4.6 --- T6 | | Impact / Crush | Pass |
| 38.3.4.7 --- T7 | | Overcharge | Pass |
| 38.3.4.8 --- T8 | | Forced Discharge | Pass |

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4. Product Classification for Transport (UN)

UN CLASSIFICATION

PROPER SHIPPING NAME

UN 3480

Lithium-Ion batteries

Document creation date

11.11.2019

This document remains valid as no changes, modification, or additions are made to the model(s) described in this document, after transported from a Manufacture Techtronic Industries GmbH facility.

The model(s) has (have) been classified according to the applicable transport regulations and the UN Manual of Tests and Criteria as of the date of the certification. The model(s) must packaged, labeled and documented according to country and international regulations for transportation.

5. Responsible person

A handwritten signature in blue ink, appearing to read 'M. Wieler', is written over a large, light blue, semi-transparent TTI logo watermark that spans the width of the page.

i.A. Maximilian Wieler

Manager Approvals, Associations and Standards
Techtronic Industries GmbH

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