

LITHIUM CELLS TEST SUMMARY

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

1	Product Manufacturer	Robert Bosch Power Tools GmbH Max-Lang-Straße 40-46 70771 Leinfelden-Echterdingen Germany +49-711-400-40990 kontakt@bosch.de
2	Model	Single cell 3.6V
3	Voltage rating	3.6V
4	Ah rating	1.0Ah / 1.26Ah / 1.3 Ah / 1.5Ah 2.0Ah / 2.5Ah / 3.0Ah / 3.1Ah 3.15Ah / 3.5Ah / 4.0Ah
5	Wh rating	3.6Wh / 4.5Wh / 4.7Wh / 5.4Wh / 7.2Wh / 9.0Wh / 10.8Wh / 11.2Wh 11.3Wh / 12.6Wh / 14.4Wh

This model of Lithium ion cells have been successfully tested and comply with the UN Model Regulations, Manual of Test and Criteria, Part III, subsection 38.3

PERFORMED TESTS		RESULTS
38.3.4.1 T1	Altitude Simulation	Passed
38.3.4.2 T2	Thermal Test	Passed
38.3.4.3 T3	Vibration	Passed
38.3.4.4 T4	Shock	Passed
38.3.4.5 T5	External Short Circuit	Passed
38.3.4.5 T6	Impact / Crush	Passed
38.3.4.5 T7	Overcharge	For battery only
38.3.4.7 T8	Forced Discharge	Passed

Revision Date: 31.7.2019

Revision Number: 2.0

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The UN 38.3 tests were performed by one of the following test houses and were tested to UN Manual Test and Criteria Revision 3 Amendment 1 or subsequent revisions or amendments.

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LITHIUM CELLS OR BATTERIES TEST SUMMARY

IN ACCORDANCE WITH SUB-SECTION 38.3

OF UN MANUAL OF TESTS AND CRITERIA

Product Test Information

Model numbers	Model name	Physical Description	Battery weight (kg)	Wh rating	Test report number	Test report date	UN Numbers acc. to UN-DGP	Proper Shipping Name acc. to UN-DGP
cell 3.6V 1.0 Ah	UR14650R US18650VT1	lithium-ion cell	0.026 0.042	3,6Wh	UN Certification UR14650R PSDS_US18650VT1 PSDS 090514	11.10.2012 14.05.2009	UN3480	Lithium ion batteries
cell 3.6V 1.250 Ah	1UF653450S-C001A	lithium-ion cell	0.025	4,5Wh	E1623225	15.11.2016	UN3480	Lithium ion batteries
cell 3.6V 1.3 Ah	INR18650-13P INR18650-13Q INR18650-13L	lithium-ion cell	0.042 0.042 0.042	4,7Wh	UN-Test Report_INR18650-13P UN_070503_UN Test Report_INR18650-13Q UN Test Report_INR18650-13L	04.05.2005 24.04.2006 27.05.2010	UN3480	Lithium ion batteries
cell 3.6V 1.5 Ah	INR18650-15Q INR18650-15L INR18650-15QM INR18650-15R UR18650W2 ICR18650HB3	lithium-ion cell	0.040 0.043 0.040 0.041 0.044 0.046	5,4Wh	MT0019194 UN Test Report_INR18650-15L MT0019194 UN Certification LithiumIon Battery_INR18650-15R UN certificate and test report for UR18650W2 UN_QAE-EF02-110530-CY018650HB3 [UN] Test Report	24.10.2013 27.05.2010 24.10.2013 20.02.2009 12.01.2012 30.05.2011	UN3480	Lithium ion batteries

cell 3.6V 2.0 Ah	INR18650-20Q UR18650R US18650VT4 INR18650-20R UR18650RX UR18650RX-135 INR18650-20RM ICR18650-HD2	lithium- ion cell	0.045 0.043 0.045 0.042 0.044 0.044 0.045 0.045	7,2Wh	MT0037872 UN certificate and test report for UR18650R UN_QA-C4007 US18650VT4 UN38.3 Air UN_INR18650-20R Certificate of UN test for Lithium battery UN certificate and test report for UR18650RX UN_transportation_certificate_RX-135 MT0055816 UN_Test_Report_Certificate of Compliance	15.02.2011 12.01.2012 23.01.2014 02.02.2012 12.01.2012 04.11.2014 29.12.2011 28.01.2013	UN3480	Lithium ion batteries
cell 3.6V 2.5 Ah	UR18650NSX ICR18650HE4 UR18650NSX-142	lithium- ion cell	0.045 0.045 0.044	9,0Wh	UN_E1208781(UR18650NSX) UN_QAE-EF02-140206-CY18650HE4 [UN] Test Report UN certificate	02.07.2012 06.02.2014 25.06.2015	UN3480	Lithium ion batteries
cell 3.6V 3.0 Ah	INR18650-30Q INR18650-30Q-138 INR18650-30Q-141 US18650VTC6	lithium- ion cell	0.045 0.045 0.046 0.046	10,8Wh	SDI-UN-140531-01 SDI-UN-140531-01 UN_Certificate_Non_Dangerous_Goods_ 30Q-141 UN_Test_Report (VTC6)	31.05.2014 31.05.2014 08.07.2015 01.04.2016	UN3480	Lithium ion batteries
cell 3.6V 3.1 Ah	1NCA903864- C004A	lithium- ion cell	0.065	11,2Wh	E1724848	24.05.2017	UN3480	Lithium ion batteries
cell 3.6V 3.15 Ah	NCR20700A	lithium- ion cell	0.056	11,3Wh	UN_Declaration_NCR20700A	17.05.2015	UN3480	Lithium ion batteries
cell 3.6V 3.5 Ah	NCR2070C	lithium- ion cell	0.061	12,6Wh	UN certificate NCR2070C	06.02.2017	UN3480	Lithium ion batteries
cell 3.6V 4.0 Ah	INR21700-40T INR21700-40T	lithium- ion cell	0.067 0.067	14,4Wh	SDI-UN-170613-01 SDI-UN-170613-01	13.06.2017 13.06.2017	UN3480	Lithium ion batteries