

## Lithium Ion Battery Test Summary

### LITHIUM CELLS OR BATTERIES TEST SUMMARY IN ACCORDANCE WITH SUB-SECTION 38.3 OF UN MANUAL OF TESTS AND CRITERIA

Product Manufacturer: Birchmeier Sprühtechnik AG  
 Im Stetterfeld 1  
 CH-5608 Stetten  
 Switzerland

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Lithium-Ion cells and Birchmeier Lithium-Ion-batteries Li-Power and LiHD have been successfully tested and comply with UN Model Regulation, Manual of Test and Criteria, Part III subsection 38.3

PERFORMED TESTS			RESULTS	
			Cells	Batteries
38.3.4.1	T1	Altitude Simulation	Pass	Pass
38.3.4.2	T2	Thermal Test	Pass	Pass
38.3.4.3	T3	Vibration	Pass	Pass
38.3.4.4	T4	Shock	Pass	Pass
38.3.4.5	T5	External Short Circuit	Pass	Pass
38.3.4.6	T6	Impact / Crush	Pass	Not applicable
38.3.4.7	T7	Overcharge	Not applicable	Pass
38.3.4.8	T8	Forced Discharge	Pass	Not applicable

The UN38.3 tests were performed at least by one of the following test houses and were tested to UN Manual Test and Criteria Revision 5 Amendment 2 or subsequent revisions or amendments.

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**Product Test Information - Cells**

<b>Model</b>	<b>Physical Description</b>	<b>Weight</b>	<b>Rating</b>	<b>Test report</b>	
number		[kg]	[Wh]	number	date
Samsung INR21700	Li-ion cylindrical cell	0,067	14,4	SDI-UN-170306-01	2017-03-06
Samsung INR21700	Li-ion cylindrical cell	0.072	18,0	SDI-UN-192426-03	2019-04-19
Samsung INR18650	Li-ion cylindrical cell	0,045	7,2	SDI-UN-150630-03	2015-06-30
Samsung INR18650	Li-ion cylindrical cell	0,045	9,0	SDI-UN-170331-02	2017-03-31

**Product Test Information - Batteries**

<b>Model</b>	<b>Physical Description</b>	<b>Weight</b>	<b>Rating</b>	<b>SoC</b>	<b>Test report</b>		
number		[kg]	[Wh]	[%]	number	date	regulation
Birchmeier Art.Nr. 12071401 CAS 6370270000 Base 321001210	Li-Ion 18 V / 4,0 Ah 5S2P, Li-Power 121 x 80 x 67 mm	0,648	72,0	> 20 < 30	28248081 001	2018-11-09	UN 3480 UN 3481
Birchmeier Art.Nr. 12070301 CAS 6370260000 Base 321001210	Li-Ion 18 V / 2,0 Ah 5S1P, Li-Power 121 x 80 x 67 mm	0,393	36,0	> 20 < 30	282251003 001	2019-09-27	UN 3480 UN 3481
Birchmeier Art.Nr. 12072501 CAS 637339000 Base 321001220	Li-Ion 18 V / 5,2 Ah 5S2P, Li-Power 121 x 80 x 67 mm	0,670	93,6	> 20 < 30	28247087 001	2019-02-20	UN 3480 UN 3481
Birchmeier Art.Nr. 12073601 CAS 637029000 Base 321001170	Li-Ion 18V / 8,0 Ah 5S2P, LiHD 121 x 80 x 67 mm	0,976	144,0	> 20 < 30	28246520 001	2017-12-05	UN 3480 UN 3481
Birchmeier Nr. 12100701 CAS 637133000 Base 321001610	Li-Ion 18V / 10,0 Ah 5S2P, LiHD 121 x 80 x 67 mm	0,996	180,0	> 20 < 30	T211-0815/20	2020-10-01	UN 3480 UN 3481

**Product equipped with Batteries**

<b>Product</b>	<b>Battery</b>
Art.Nr.	Art.Nr.
12070701	12070301
12022801	12070301
12070801	12070301
12070901	12071401
12071001	12072501
12071701	12071401
12071801	12072501
12072001	12071401
12072101	12072501
12072701	12073601
12072901	12073601
12073201	12073601
12073701	12073601
12073801	12073601
12073901	12073601
12074001	12071401
12074101	12073601
12074201	12073601
12075101	12071401
12089801	12070301
12089901	12070301
12090001	12071401
12090301	12071401
12090401	12071401
12090501	12071401
12090501	12071401
12090601	12071401
12090601	12071401
12090701	12071401
12090701	12071401
12091101	12071401
12092001	12071401
12094501	12070301
12094601	12071401
12094901	12071401

<b>Product</b>	<b>Battery</b>
Art.Nr.	Art.Nr.
12095001	12070301
12097601	12070301
12098101	12070301
12099901	12070301
12107401	12071401
12108501	12070301
12108601	12073601
12118001	12100701
12118101	12100701
12118201	12100701
12118301	12100701
12129001	12100701

**Signature of responsible person  
of the Company**