UN 38.3 Lithium Battery Test Summary

Cell, Battery or Product Model Number

Item Number:

Item Name: Li-ion Battery

Cell, battery, or product manufacturer's contact information

Name: Guangdong Mic-power New Energy Co., Ltd

Address: 4 Xingju West Rd Dongxing District Dongjiang High-Tech Industrial Park, Zhongkai High-tech Zone Huizhou, Guangdong

State: Guangdong ZIP: 516055 City: Huizhou Country: China

Telephone: 0752-3315939 E-mail: pujianlin@mic-power.cn Website:

Test Laboratory

Name: Attestation of Global Comliance (Shenzhen) Co.,Ltd

Address: 2/F Building 2 ,No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu,Xixian Baoan District ,Shenzhen

Country: China Shenzhen State: Guangdong ZIP: 518102 City:

Telephone: 18138297015 E-mail: / Website: /

Cell	or Ba	ttery Description			A STATE OF THE STA	
Cell or Battery: Battery					Physical Description (dimensions, appearance):	
Cell or Battery Type: Li-ion Battery M1254						
Watt-	Watt-hour rating or Lithium Content: 0.222Wh				S304 stainss steel shell	
Comp	oleted	Cell or Battery Weight: 1.835g			*	
Uniqu	ie Test	Report ID Number: AGC058051	181002	UA01	Date of test report: 2018.10.16-2018.11.05	
	List of Tests Completed:					
Yes	No		Pass	Fail	Additional Comments (or indicate compliance with other standards, e.g., Underwriters Laboratory):	
Yes		Test T.1: Altitude simulation	Pass		Not Applicable	
Yes		Test T.2: Thermal test	Pass		Not Applicable	
Yes		Test T.3: Vibration	Pass		Reference to assembled battery testing requirements, if applicable (i.e., 38.3.3 (f) and 38.3.3 (g)).	
Yes		Test T.4: Shock	Pass		Not Applicable	
Yes		Test T.5: External short circuit	Pass		Not Applicable	
Yes		Test T.6: Impact/Crush	Pass		Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto, if any:	
Yes		Test T.7: Overcharge	Pass		Sixth Edition	
Yes		Test T.8: Forced discharge	Pass		SIXIII EUILIOII	

Signature with name and title of signatory as an indication of the validity of information provided:

Date:

2019.12.9

UN 38.3 Lithium Battery Test Summary

Cell, Battery or Product Model Number

Item Number:

Item Name: Li-ion Battery

Cell, battery, or product manufacturer's contact information

Name: Guangdong Mic-power New Energy Co., Ltd

Address: 4 Xingju West Rd Dongxing District Dongjiang High-Tech Industrial Park, Zhongkai High-tech Zone Huizhou, Guangdong

City:

Huizhou

State: Guangdong

ZIP: 516055

Country: China

Telephone: 0752-3315939

E-mail: pujianlin@mic-power.cn Website:

Test Laboratory

Name: Attestation of Global Comliance (Shenzhen) Co.,Ltd

Address: 2/F Building 2 ,No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu,Xixian Baoan District ,Shenzhen

City:

Shenzhen

State: Guangdong

ZIP: 518102 Country: China

Telephone: 18138297015

E-mail: /

Website: /

Cell	or Ba	ttery Description			
Cell c	or Batte	ery: Battery			Physical Description (dimensions, appearance):
Cell c	or Batte	ery Type: Li-ion Battery M1454			
Watt-	hour r	ating or Lithium Content: 0.333V	√h		S304 stainss steel shell
Com	oleted	Cell or Battery Weight: 2.46g			
Uniqu	ue Test	Report ID Number: AGC058051	90302	UA01	Date of test report: 2019.03.27-2019.04.15
List of Tests Completed:					
Yes	No		Pass	Fail	Additional Comments (or indicate compliance with other standards, e.g., Underwriters Laboratory):
Yes		Test T.1: Altitude simulation	Pass		Niet Appliechie
Yes		Test T.2: Thermal test	Pass		Not Applicable
Yes		Test T.3: Vibration	Pass		Reference to assembled battery testing requirements, if applicable (i.e., 38.3.3 (f) and 38.3.3 (g)).
Yes		Test T.4: Shock	Pass		Not Applicable
Yes		Test T.5: External short circuit	Pass		Not Applicable
Yes		Test T.6: Impact/Crush	Pass		Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto, if any:
Yes		Test T.7: Overcharge	Pass		Civth Edition
Yes		Test T.8: Forced discharge	Pass		Sixth Edition

Signature with name and title of signatory as an indication of the validity of information provided:

frichael



in accordance with UN Manual of Tests and Criteria Part III, subsection 38.3

Information about the manufacturer

VARTA Microbattery GmbH Name

Address Daimlerstrasse 1

73479 Ellwangen

Germany

Phone +49 7961 921-0

E-mail info@varta-microbattery.com Website www.varta-microbattery.com

Description of the product

Lithium ion cell

Physical description Rechargeable lithium ion button cell

Product test information

Each object of this declaration has been tested and was found to be compliant with the UN Manual of Test and Criteria, Part III, subsection 38.3. This includes all single cells and battery assemblies containing not more than one cell of those given in the following list.

Model	Mass		Edition of the manual of test and criteria ST/SG/AC.10/11	Test report number	Test report date
CP1254A3	1.6 g	0.2 Wh	Rev. 5 Amend. 2 (2013)	1116080184	2016-10-18

List of tests conducted and results

Test Item	Test Result	Test Item	Test Result
T1. Altitude simulation	pass	T5. External short circuit	pass
T2. Thermal test	pass	T6. Crush	pass
T3. Vibration	pass	T7. Overcharge	N/A
T4. Shock	pass	T8. Forced Discharge	pass

Test laboratories

The tests were performed by the following test laboratory.

Name	Shanghai Research Institute of Chemical Industry (SRICI) Testing Centre
Address	No. 345 Yunling East Road, Pudong Shanghai 200062 China
Phone	+86 21-52569800
E-mail	msds123@gmail.com
Website	www.ghs.cn

Page no.: 1 of 2

Edition: 2019-06-04

Version: 02

VARTA Microbattery GmbH Daimlerstraße 1 73479 Ellwangen Germany



in accordance with UN Manual of Tests and Criteria Part III, subsection 38.3

Additional information

In original VARTA packaging the products comply with the following special provisions of international transport regulations:

- IATA DGR: Packing Instruction 965 Section IB (max. 30 % state of charge)
 (Transportations of cells or batteries packed with equipment or contained in equipment have to follow Packing Instructions 966 or 967 Section II.)
- ADR/RID/ADN/IMDG Code: Special Provision 188
- DOT / 49 CFR: §173.185 (c)

The products have been manufactured under a quality management program according to IATA DGR clause 3.9.2.6.1 (e), ADR clause 2.2.9.1.7 e), and IMDG code clause 2.9.4.5.

Ellwangen, 2019-06-04

(place and date of issue)

VARTA Microbattery GmbH
Daimlerstrasse 1
D-73479 Ellwangen
Germany
VARTA

(company stamp)

Dr. Sebastian Röhler Manager Product Compliance

With tell

(signature)

Page no.: 2 of 2

Edition: 2019-06-04

Version: 02

VARTA Microbattery GmbH Daimlerstraße 1 73479 Ellwangen Germany



in accordance with UN Manual of Tests and Criteria Part III, subsection 38.3

Information about the manufacturer

Name VARTA Microbattery GmbH

Address Daimlerstrasse 1

73479 Ellwangen

Germany

Phone +49 7961 921-0

E-mail info@varta-microbattery.com
Website www.varta-microbattery.com

Description of the product

Type Lithium ion cell

Physical description Rechargeable lithium ion button cell

Product test information

Each object of this declaration has been tested and was found to be compliant with the UN Manual of Test and Criteria, Part III, subsection 38.3. This includes all single cells and battery assemblies containing not more than one cell of those given in the following list.

Model	Ma	ass		Edition of the manual of test and criteria ST/SG/AC.10/11	Test report number	Test report date
CP1454	4A3	2.3 g	0.3 Wh	Rev. 5 Amend. 2 (2013)	1116050015	2016-06-07

List of tests conducted and results

Test Item	Test Result	Test Item	Test Result	
T1. Altitude simulation	pass	T5. External short circuit	pass	
T2. Thermal test	pass	T6. Crush	pass	
T3. Vibration	pass	T7. Overcharge	N/A	
T4. Shock	pass	T8. Forced Discharge	pass	

Test laboratories

The tests were performed by the following test laboratory.

Name	Shanghai Research Institute of Chemical Industry (SRICI) Testing Centre
Address	No. 345 Yunling East Road, Pudong Shanghai 200062 China
Phone	+86 21-52569800
E-mail	msds123@gmail.com
Website	www.ghs.cn

Page no.: 1 of 2

Edition: 2019-06-04

Version: 04



in accordance with UN Manual of Tests and Criteria Part III, subsection 38.3

Additional information

In original VARTA packaging the products comply with the following special provisions of international transport regulations:

- IATA DGR: Packing Instruction 965 Section IB (max. 30 % state of charge)
 (Transportations of cells or batteries packed with equipment or contained in equipment have to follow Packing Instructions 966 or 967 Section II.)
- ADR/RID/ADN/IMDG Code: Special Provision 188
- DOT / 49 CFR: §173.185 (c)

The products have been manufactured under a quality management program according to IATA DGR clause 3.9.2.6.1 (e), ADR clause 2.2.9.1.7 e), and IMDG code clause 2.9.4.5.

Ellwangen, 2019-06-04

(place and date of issue)

Daimlerstrasse 1
D-73479 Ellwangen
Germany

(company stamp)

Dr. Sebastian Röhler Manager Product Compliance

With tell

(signature)

Page no.: 2 of 2

Edition: 2019-06-04

Version: 04

VARTA Microbattery GmbH Daimlerstraße 1 73479 Ellwangen Germany

UN 38.3 Lithium Battery Test Summary

Cell, Battery or Product Model Number

Item Number:

Item Name: Li-ion Battery AHB651935HPJ 3.8V 450mAh 1.8Wh

Cell, battery, or product manufacturer's contact information

Name: Kunshan SYNergy ScienTech Co.,Ltd

Address: No.688, Nanhe Road, Economic&Technical Development Zone, Kunshan, Jiangsu

City: KunShan

State: Jiangsu ZIP: 215300

Country: China

Telephone: +86-512-57710688 E-mail: hmsong@synst.com.cn Website: http://www.synst.com.cn

Test Laboratory

Name: The laboratory for UN38.3 of Kunshan SYNergy ScienTech Co., Ltd

Address: 688# Nanhe Road Kunshan

City: KunShan

KunShan State: Jiangsu

ZIP: 215300

Country: China

Telephone: +86-0512-57710688-3411

E-mail: alice@synst.com.cn

Website: http://www.synst.com.cn

Cell	or Ba	ttery Description			
Cell c	or Batte	ery: Battery			Physical Description (dimensions, appearance):
Cell c	Cell or Battery Type: AHB651935HPJ				
Watt-	hour r	ating or Lithium Content: 1.8Wh			Silvery aluminum-plastics shell
Com	oleted	Cell or Battery Weight: Approx.	8.7g		, , , , , , , , , , , , , , , , , , , ,
Uniqu	ie Test	Report ID Number: UN1812240	1		Date of test report: 2018-12-25~2019-01-23
List of Tests Completed:					
Yes	No		Pass	Fail	Additional Comments (or indicate compliance with other standards, e.g., Underwriters Laboratory):
Yes		Test T.1: Altitude simulation	Pass		Not Appliants
Yes		Test T.2: Thermal test	Pass		Not Applicable
Yes		Test T.3: Vibration	Pass		Reference to assembled battery testing requirements, if applicable (i.e., 38.3.3 (f) and 38.3.3 (g)).
Yes		Test T.4: Shock	Pass		Nick Amelicals
Yes		Test T.5: External short circuit	Pass		Not Applicable
Yes		Test T.6: Impact/Crush	Pass		Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto, if any:
Yes		Test T.7: Overcharge	Pass		Civth Edition
Yes		Test T.8: Forced discharge	Pass	-	Sixth Edition

Signature with name and title of signatory as an indication of the validity of information provided:

in 12 laboratory ingineer



NTEK北测

	Test Summary 测试汇总				
(a)	Product manufacturer 产品制造商	Huizhou Everpower Technology Co., Ltd. 惠州市恒泰科技股份有限公司			
(b)	Contact information of manufacturer 制造商联系信息	Address: NO.2 Building, NO.55 District, Zh Huizhou City, Guangdong Province, P.R.C 地址:惠州市仲恺高新区55号区厂房2 Phone number 电话号码: +86 150139919 Email 电子邮件: lulm@htkjbattery.com Website 网址: None	china		
(c)	Information of test laboratory 测试实验室信息	Shenzhen NTEK Testing Technology Co., 深圳市北测检测技术有限公司 Address 1/F, Building C, Fenda Science F Xixiang Street, Bao'an District, Shenzhen 地址:探州市宝安区西乡三围奋达科技园 CTel 电话: +86-755-6115 6588 Fax 传真: -E-mail 邮箱: Kevin@ntek.org.cn Website 网址: http://www.ntek.org.cn	Park, Sanwei Community, 518126 P.R. China C 栋 1 楼		
(d)	Report Ref. No. 报告编号	S19051703101001-R1			
(e)	Date of issue 签发日期	2019-12-06			
(f)	Description of product 产品描述	Name 名称: Rechargeable Li-ion Battery Model 型号: PL661935V Rating 额定: 3.8V 450mAh 1.71Wh Mass 质量: 8g Appearance 外观: Silvery and Prismatic f			
(g)	Test items and results 测试项目及结果	Test T.1-Altitude simulation / 高度模拟 Test T.2-Thermal Test / 温度试验 Test T.3-Vibration / 振动 Test T.4-Shock / 冲击 Test T.5-External short circuit / 外部短路 Test T.6- Crush / 挤压 Test T.7-Overcharge / 过度充电 Test T.8-Forced discharge / 强制放电	Pass 合格		
(h)	Assembled battery testing requirements 组装电池组测试要求	Not applicable 不适用			
(i)	Revised edition of the Manual of Tests and Criteria 试验和标准手册修订版本	Rev.6/Amend.1 第六修订版修正 1			
(j)	Name and title 姓名和职位	Lamei Lu/Certified engineer	N证工程师		