Supplier's Test Summary

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 metal cell
Physical description	Primary lithium metal 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	Lithium content	Edition of the manual of test and criteria ST/SG/AC.10/11	Test report number	Test report date
CR2032	3 g	0.07 g	Rev. 4 (2003)	LB160059	2006-08-23
CR2032-P	3 g	0.07 g	Rev. 5 / Amend. 1 (2011)	1113110028	2013-12-09
CR2032-N	3.2 g	0.064 g	Rev. 6 (2015)	LJKJ20180112U01	2018-02-02

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. Impact/Crush	pass
T3. Vibration	pass	T7. Overcharge	N/A
T4. Shock	pass	T8. Forced Discharge	pass

Test laboratories

The tests were performed by one of the following test laboratories.

Name	Shanghai Research Institute of Chemical Industry Testing Centre (SRICI)	Name	Guangzhou MCM Certification and Testing Co., Ltd
Address	No. 345 Yunling East Road, Pudong Shanghai 200062 China	Address	1 F No. 13, Zhong San Section, Shi Guang Road, Panyu District, Guanzhou Citiy Guangdong Province, China
Phone	+86 21 52569800	Phone	+86 20 34777662
E-mail	msds123@gmail.com	E-mail	markmiao@mcmtek.com
Website	www.ghs.cn	Website	www.mcmtek.com

VARTA Microbattery GmbH
Daimlerstraße 1
73479 Ellwangen
Germany

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Additional information

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

- IATA DGR: Packing Instruction 968 Section IB
  (Transportations of cells or batteries packed with equipment or contained in equipment have to follow Packing Instructions 969 or 970 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, 2019-07-30

Place and date of issue

VARTA Microbattery GmbH
Daimlerstrasse 1
D-73479 Ellwangen
Germany
VARTA

Company stamp

i. A.

Dr. Sebastian Röhler
Manager Product Compliance

Signature

VARTA Microbattery GmbH
Daimlerstraße 1
73479 Ellwangen
Germany