

Gefahrgutinformation / Dangerous Goods Information

Artikelnummer/Article number: **7KM5212-6CA00-1EA8, 7KM5412-6CA00-1EA8
7KM5212-6BA00-1EA2, 7KM5412-6BA00-1EA2
PAC 5100, PAC 5200**

Das Produkt enthält

- 1 eingebaute Lithium-Metall-Knopfzelle, die die Voraussetzungen der Sondervorschrift 188 der „UN Recommendations on the Transport of Dangerous Goods“ erfüllt, insbesondere:
 - Zelle \leq 1 g Lithiumgehalt
 - Zelle entspricht einem Typ, für den nachgewiesen wurde, dass er die Anforderungen jedes zum Testzeitpunkt anwendbaren Tests des UN Manual of Tests and Criteria, Teil III, Unterabschnitt 38.3, Revision 3 Amendment 1 oder einer nachfolgenden Revision und Amendment erfüllt.

(weitere Details s. auch Anlage Test Summary)

Das Produkt ist daher bei Lieferung für die nachfolgend angeführten Gefahrgutvorschriften wie angegeben klassifiziert und ist entsprechend den anwendbaren nationalen und internationalen Gefahrgutvorschriften für die genutzten Verkehrsträger zu befördern.

Bitte beachten Sie für weitere Beförderungen die fortlaufenden Änderungen der Gefahrgutvorschriften sowie ggf. Änderungen am Produkt nach Lieferung.

The product contains

- 1 installed lithium metal button cell meeting the preconditions of Special Provision 188 of the “UN Recommendations on the Transport of Dangerous Goods”, especially:
 - Cell \leq 1 g lithium content
 - Cell is of a type proved to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3, Revision 3 Amendment 1 or any subsequent revision and amendment applicable at the date of the type testing (more details see attached Test Summary).

On delivery, the product is therefore classified according to the dangerous goods regulations as mentioned below and has to be transported according to the applicable national and international dangerous goods regulations for the modes of transport used.

Please consider for further transports the continuous changes of the dangerous goods regulations as well as applicable changes of the product after delivery.

Anlage / Attachment:

Test Summary according 38.3 UN Manual of Tests and Criteria

ADR/RID/ADN: UN 3091 Lithium-Metall-Batterien in Ausrüstungen, 9,
1 Knopfzelle pro Gerät, Voraussetzungen der Sondervorschrift 188 erfüllt
UN 3091 Lithium metal batteries contained in equipment, 9,
1 button cell per equipment, preconditions of Special Provision 188 met

ICAO-TI/IATA-DGR: UN 3091 Lithium metal batteries contained in equipment, 9,
1 button cell per equipment, preconditions of Section II PI 970 met

IMDG Code: UN 3091 Lithium metal batteries contained in equipment, 9,
1 button cell per equipment, preconditions of Special Provision 188 met

Batterie / battery: Typ, type: 1x CR2032
Hersteller, manufacturer: Panasonic CR2032 oder / or
Varta CR 2032 (Typ Number 6032)



Lithium Battery Test Summary / UN38.3 試験結果要約

Product manufacturer	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-80-9932-3190 (JST Working hours)
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html
Test laboratory	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-80-9932-3190 (JST Working hours)
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html

Description of Product / 製品情報

Model Number/品番	CR2032
Type/タイプ	Lithium metal cell
Physical description/物理特性	Non-rechargeable, Coin
Mass/質量	2.9 g
Lithium content/リチウム含有量	0.07 g
Watt-hour rating/ワット時定格値	Not applicable
Nominal Voltage/公称電圧	3.0 V
Nominal Capacity/公称容量	225 mAh


Test Results / 結果

Identification number/番号	CP0008-12
Date of test report/レポート発行日	2020/06/29
Reference edition/参照	UN Manual of Tests and Criteria, Revision 6 with Amendment 1

UN Manual of Tests and Criteria 国連勧告テスト判定基準	Results 結果	Remarks 備考
T1 : Altitude simulation / 高度シミュレーション	Pass / 合格	
T2 : Thermal Test / 温度試験	Pass / 合格	
T3 : Vibration / 振動	Pass / 合格	
T4 : Shock / 衝撃	Pass / 合格	
T5 : External short circuit / 外部短絡	Pass / 合格	
T6 : Impact / 衝突, Crush / 圧壊	Pass / 合格	Crush / 圧壊
T7 : Overcharge / 過充電	-	for rechargeable batteries only / 充電式電池のみ
T8 : Forced discharge / 強制放電	Pass / 合格	

Hereby we certify that this model of Lithium battery meets the requirements of each test in the UN Manual of Tests and Criteria Part III, sub-section 38.3.

上記テストは国連勧告テスト(Manual of Tests and Criteria, Part III, sub-section 38.3.)に従い確認された結果であることを証明致します。

Signature: 

Name and Title: Kazuyuki Amano / Manager
Energy Device Business Division

Lithium Battery Test Summary / UN38.3 試験結果要約

Product manufacturer	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-6-6994-4560
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html
Test laboratory	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-6-6994-4560
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html

Description of Product / 製品情報

Model Number/品番	CR2032
Type/タイプ	Lithium metal cell
Physical description/物理特性	Non-rechargeable, Coin
Mass/質量	2.9 g
Lithium content/リチウム含有量	0.07 g
Watt-hour rating/ワット時定格値	Not applicable
Nominal Voltage/公称電圧	3.0 V
Nominal Capacity/公称容量	225 mAh

Test Results / 結果

Identification number/番号	CP0008-10
Date of test report/レポート発行日	2008/08/05
Reference edition/参照	UN Manual of Tests and Criteria, Revision 4 with Amendment 1

UN Manual of Tests and Criteria 国連勧告テスト判定基準	Results 結果	Remarks 備考
T1 : Altitude simulation / 高度シミュレーション	Pass / 合格	
T2 : Thermal Test / 温度試験	Pass / 合格	
T3 : Vibration / 振動	Pass / 合格	
T4 : Shock / 衝撃	Pass / 合格	
T5 : External short circuit / 外部短絡	Pass / 合格	
T6 : Impact / 衝突, Crush / 圧壊	Pass / 合格	Impact / 衝突
T7 : Overcharge / 過充電	-	for rechargeable batteries only / 充電式電池のみ
T8 : Forced discharge / 強制放電	Pass / 合格	

Hereby we certify that this model of Lithium battery meets the requirements of each test in the UN Manual of Tests and Criteria Part III, sub-section 38.3.

上記テストは国連勧告テスト(Manual of Tests and Criteria, Part III, sub-section 38.3.)に従い確認された結果であることを証明致します。

Signature: 

Name and Title: Kazuyuki Amano / Manager
Energy Device Business Division



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 VARTA-Platz 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. 6 / Amend. 1	1120060501	2020-07-29
CR2032-P	3 g	0.07 g	Rev. 6 / Amend. 1	1121040203	2021-05-20
CR2032-N	3.2 g	0.064 g	Rev. 6	LJKJ20180112U01	2018-02-02

List of tests conducted and results

Test Item	Test Result	Test Item	Test Result
T.1 Altitude simulation	pass	T.5 External short circuit	pass
T.2 Thermal test	pass	T.6 Impact/Crush	pass
T.3 Vibration	pass	T.7 Overcharge	N/A
T.4 Shock	pass	T.8 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 City, 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

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, 2021-07-19

Place and date of issue



Company stamp

Dr. Sebastian Röhler
Manager Product Compliance

Signature, name and title

Information about the manufacturer

Name VARTA Microbattery GmbH
 Address VARTA-Platz 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	LB160059	2006-08-23
CR2032-P	3 g	0.07 g	Rev. 5 / Amend. 1	1113110028	2013-12-09
CR2032-N	3.2 g	0.064 g	Rev. 6	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, Guangzhou City 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

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
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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, 2019-12-19

Place and date of issue

VARTA Microbattery GmbH
VARTA - Platz 1
D-73479 Ellwangen
Germany


Company stamp

i. A. 

Dr. Sebastian Röhrler
Manager Product Compliance

Signature, name and title