

This product is a consumer product which is used in a hermetically sealed state. So, it is not an object of the SDS system. This document is provided to customers as reference information for the safe handling of the product. The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Panasonic Corporation makes no warranty expressed or implied.

PRODUCT SAFETY DATA SHEET

1 Chemical product and company identification

Name of Product : Manganese dioxide lithium battery
Name of Company : Panasonic Corporation
Address : 1-1 Matsushita-cho, Moriguchi-city, Osaka, 570-8511, Japan
Emergency Contact : +8180-9932-3190 (JST Working hours)
+81-6-6991-1141 (Holiday)

2 Hazards identification

GHS Classification : Not applicable
Toxicity : Vapor generated from burning batteries, may irritate eyes, skin and throat.
Hazard : Electrolyte and lithium metal are inflammable.
Risk of explosion by fire if batteries are disposed in fire or heated above 100 degrees C.
Stacking or jumbling batteries may cause external short circuits, heat generation, fire or explosion.

3 Composition/information of ingredients

Component	Material	CAS No.	Content (%)
Positive electrode	Manganese dioxide	1313-13-9	12 - 50
Negative electrode	Lithium metal	7439-93-2	0.5 - 6
Electrolyte	1,2-dimethoxyethane	110-71-4	1.5 - 3.5
	Lithium Perchlorate	7791-03-9	0.2 - 0.7
	Organic electrolyte	-	2.5 - 7
Others (Steel or Plastic parts)	Steel	7439-89-6, 7440-47-3	30 - 85
	Polypropylene	9003-07-0	0.5 - 10

Lithium content per cell

Model Number	Lithium content(g)	Model Number	Lithium content(g)	Model Number	Lithium content(g)	Model Number	Lithium content(g)
CR1025	0.008	CR2012	0.02	CR2330	0.08	CR2412	0.03
CR1216	0.008	CR2016	0.03	CR2354	0.17	CR2430	0.09
CR1220	0.01	CR2025	0.05			CR2450	0.18
CR1612	0.01	CR2032	0.07			CR2477	0.29
CR1616	0.02						
CR1620	0.02					CR3032	0.15
CR1632	0.04						

4 First aid measures (in case of electrolyte leakage from the battery)

- Eye contact : Flush the eyes with plenty of clean water for at least 15 minutes immediately, without rubbing. Get immediate medical treatment. If appropriate procedures are not taken, this may cause eye injury.
- Skin contact : Wash the affected area under tepid running water using a mild soap. If appropriate procedures are not taken, this may cause sores on the skin. Get medical attention if irritation develops or persists.
- Inhalation : Remove to fresh air immediately. Get medical treatment immediately.

5 Firefighting measures

- Fire extinguishing agent : Alcohol-resistant foam and dry sand are effective.
- Extinguishing method : Be sure on the windward to extinguish the fire, since vapor may make eyes, nose and throat irritate. Wear the respiratory protection equipment in some cases.

6 Accidental release measures (in case of electrolyte leakage from the battery)

- Take up with absorbent cloth, treat cloth as inflammable.
- Move the battery away from the fire.

7 Handling and storage

- Handling :
 - When packing the batteries, do not allow battery terminals to contact each other, or contact with other metals. Be sure to pack batteries by providing partitions in the packaging box, or in a separate plastic bag so that the single batteries are not mixed together.
 - Use strong material for packaging boxes so that they will not be damaged by vibration, impact, dropping and stacking during their transportation.
 - Do not short-circuit, recharge, deform, throw into fire or disassemble.
 - Do not mix different type of batteries.
 - Do not solder directly onto batteries.
 - Insert the battery correctly in electrical equipment.
- Storage :
 - Do not let water penetrate into packaging boxes during their storage and transportation.
 - Do not store the battery in places of the high temperature or under direct sunlight.
 - Please also avoid the places of high humidity. Be sure not to expose the battery to condensation, rain or frozen condition

8. Exposure controls and personal protection

Acceptable concentration : Not specified about Lithium Battery.
Facilities : Nothing in particular.

Protective Equipment (in case of electrolyte leakage from the battery)

Respiratory Protection : For most condition no respiratory protection.
Hand Protection : Safety gloves.
Eye Protection : Safety goggle

9. Physical and chemical properties

Appearance : Coin shape
Nominal Voltage : 3 V

10. Stability and reactivity

Since batteries utilize a chemical reaction they are actually considered a chemical product.
As such, battery performance will deteriorate over time even if stored for a long period of time without being used. In addition, the various usage conditions such as discharge, ambient temperature, etc. are not maintained within the specified ranges the life expectancy of the battery may be shortened or the device in which the battery is used may be damaged by electrolyte leakage.

11. Toxicological information

Swallowing can lead to chemical burns, perforation of soft tissue, and death. Severe burns can occur within 2 hours of ingestion. Seek medical attention immediately.

12. Ecological information

In case of the worn out battery was disposed in land, the battery case may be corroded, and leak electrolyte. However, there is no environmental impact information.
Mercury (Hg), Cadmium (Cd) and Lead (Pb) are not used in cell.

13. Disposal considerations

When the battery is worn out, dispose of it under the ordinance of each local government.

14. Transport information

Handling

During the transportation of a large amount of batteries by ship, trailer or railway, do not leave them in the places of high temperatures and do not allow them to be exposed to condensation.

During the transportation do not allow packages to be dropped or damaged.

UN Number, UN Class : UN3090, Class9 (for the Air transport by PI968 Section IA or IB)
: Exemption (for the Marine transport and the Air transport by Section II of PI 968, 969 or 970)
Even though the cells are classified as lithium metal batteries (UN3090 or UN3091), they are not subject to some requirements of Dangerous Goods Regulations because they meet the following:

1. for cells, the lithium content is not more than 0.3g ;
2. each cell is of the type proven to meet the requirements of each test

- in the UN Manual of Tests and Criteria, Part III, sub-section 38.3 ;
3. each cell is manufactured in ISO9001 certified factory ;
4. the test summary is available from ;
<https://industrial.panasonic.com/ww/downloads/battery-test-summary>

Please refer to the following reference information about concrete ways of transportation. Actual content of packaging label and shipping documents varies by shipping companies. Make sure to confirm in advance with your shipping company.

Information of reference

	Reference	Packing Instruction(PI)/ Special provision(SP)	Note
Air transport	IATA DGR	PI 968 Section I A	Cells, Cargo Aircraft only; Net quantity per package Max. 35kg
		PI 968 Section I B	Cells, Cargo Aircraft only; net quantity per package Max. 2.5kg
		PI 968 Section II	Cells, Cargo Aircraft only, not more than one package in any single consignment; net quantity per package Max. 2.5kg (PI968 Section II can be used until 2022/3/31)
		PI 969 Section II	Cells packed with equipment
		PI 970 Section II	Cells contained in equipment, button cell batteries
Marine transport	IMDG Code	SP 188	

15. Regulatory information

- IATA Dangerous Goods Regulations Edition 63 (IATA DGR)
- IMO International Maritime Dangerous Goods Code 2018 and 2020 Edition (IMDG Code)
- UN Recommendations on the Transportation of Dangerous Goods, Model Regulations
- UN Recommendations on the Transportation of Dangerous Goods, Manual of Tests and Criteria
- EU Battery Directive (2006/66/EC, 2013/56/EU)
- Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- State of California Regulations - Best management practices for Perchlorate Materials
- Act on Preventing Environmental Pollution of Mercury (Japan)

16. Other information

This PSDS is provided to customers as reference information in order to handle batteries safely. It is necessary for the customer to take appropriate measures depending on the actual situation such as the individual handling, based on this information.

In California only, packages that contain CR lithium coin cells and the Owners/Operating Instructions of products that contain CR lithium coin cells must include the following statement: "Perchlorate Material - special handling may apply,

See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate>".

The effective date for this Perchlorate label is July 1, 2006 for non-consumer products and January 1, 2007 for consumer products.

Prepared by : Engineering Department
Energy Device Business Division
Panasonic Corporation

授权书 兼 联络书

致 上海化工研究院检测中心

首先感谢贵院一直以来对我公司的大力支持！

当前我公司因以下授权书所列客户的要求给予发行授权书；

日后，该客户到贵院申请『UN38.3 试验概要』『货物运输条件鉴定书』以及授权该公司使用我司签发的电池 UN38.3 检验报告及 1.2 米跌落测试报告的事项时请求给予受理此申请业务，再次拜托。

パナソニック株式会社
Panasonic Corporation
エナジーデバイス事業部
Energy Device Business Division
技術部
Engineering Department

長谷 洋志

2020-06-29

授权书

致 上海化工研究院检测中心

兹有我公司提供的如下表所示型号的电池 UN38.3 检验报告，
及 1.2 米跌落测试报告，现授权 益逻触控系统（苏州）有限公司 使用。
特此证明。

型号	文书名称	文书编号
CR-2032L/BN	UN38.3 检验报告	CP0008-10
CR-2032L/BN	1.2 米落下试验报告	CPC160028-1

松下电器产业株式会社
检验报告パナソニック株式会社
オートモーティブ&インダストリアルシステムズ社
エナジーデバイス事業部

Panasonic Corporation

No. CP0008-10

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样品名称 Name of Sample	中文 Chinese	锂电池 CR2032 (3.0V 225mAh)	
	英文 English	Lithium Battery CR2032 (3.0V 225mAh)	
送检单位 Consignor	松下电器产业株式会社/ Panasonic Corporation		
生产单位 Manufacturer	松下电器产业株式会社/ PT. Panasonic Gobel Energy Indonesia		
检验方法 Test Method	联合国《关于危险货物运输的建议书》 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS"		
判定标准 Criterion	联合国《关于危险货物运输的建议书》 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS"		
样品外观 Appearance	硬币形 Coin type		
检测起迄日期 Test Date	2008/4/1-2008/8/5	样品编号 Sample No	/
检测项目 Test Items	高度模拟试检; 热测试; 振动试检; 冲击试检; 外短路试检; 冲撞试检; 强制放电试检 Altitude simulation, Thermal test, Vibration test, Shock, External short circuit, Impact, Forced discharge		
检验结论 Conclusion	受检样品通过 UN38.3检测, 检测合格。 The sample has passed the test items of UN38.3. 日期(date):2008年(y) 08月(m) 5日(d)		
备注 Remark	/		
受检单位地址 Consignor Address	日本:大阪府守口市松下町1番1号 1-1 Matsushita-cho, Moriguchi City Osaka, Japan	邮政编码 Post Code	570-8511

批准人职务(the title of approver):

☒ 质量保证部长(Director of Quality Assurance)☐ 质量保证科长(Manager of Quality Assurance)☐ 质量保证主任工程师(Chief Engineer of QA)

批准 Approver: J. Okamoto

审核 Checker: T. Shimozu

主检 Appraiser: Y. Hattori

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松下电器产业株式会社
检验报告

Panasonic Corporation

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序号 No	检测项目 Name of Test Items	标准要求或标准款号 Standard Requirement or the Clause Number of Standard	检验结果 Test Result	本项结论 Test Conclusion	备注 Remark
1	高度模拟试检 Altitude simulation	试检和标准手册38.3(4 th) 38.3 Test T-1 UN Manual of Tests and Criteria Section (4 th) 38.3 Test T-1	见附表1 See Appendix 1	合格 Passed	/
2	热测试检 Thermal test	试检和标准手册38.3(4 th) 38.3 Test T-2 UN Manual of Tests and Criteria Section (4 th) 38.3 Test T-2	见附表2 See Appendix 2	合格 Passed	/
3	振动试检 Vibration test	试检和标准手册38.3(4 th) 38.3 Test T-3 UN Manual of Tests and Criteria Section (4 th) 38.3 Test T-3	见附表3 See Appendix 3	合格 Passed	/
4	冲击试检 Shock	试检和标准手册38.3(4 th) 38.3 Test T-4 UN Manual of Tests and Criteria Section (4 th) 38.3 Test T-4	见附表4 See Appendix 4	合格 Passed	/
5	外短路试检 External short circuit	试检和标准手册38.3(4 th) 38.3 Test T-5 UN Manual of Tests and Criteria Section (4 th) 38.3 Test T-5	见附表5 See Appendix 5	合格 Passed	/
6	冲撞试检 Impact	试检和标准手册38.3(4 th) 38.3 Test T-6 UN Manual of Tests and Criteria Section (4 th) 38.3 Test T-6	见附表6 See Appendix 6	合格 Passed	/
7	强制放电试检 Forced discharge	试检和标准手册38.3(4 th) 38.3 Test T-8 UN Manual of Tests and Criteria Section (4 th) 38.3 Test T-8	见附表7 See Appendix 7	合格 Passed	/
检验环境条件 / Test Environment Condition		环境温度: 15-25℃ / Ambient Temperature: 15-25℃			
分包检验状况 Subcontracted Test Condition	检测项目 Test Items	/			
	分包实验室 Subcontracted Laboratory	名称 Name	/	邮编 Post Code	/
		地址 Address	/	电话 Tel	/

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-----附表1

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Appendix 1

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序号 No.	T-1	检测项目名称 Name of Test Items		高度模拟试检 Altitude simulation				
样品 号码 Sample No.	样品状态 Sample State	试检前 Before		试检后 After		质量 Loss (%)	剩余电压 Residual OCV (%)	其他 现象 Other Event
		质量 Mass (g)	开路电压 OCV (V)	质量 Mass (g)	开路电压 OCV (V)			
1	未放电 Undischarged	2.866	3.203	2.866	3.204	0.00	100.0	0
2	未放电 Undischarged	2.869	3.203	2.869	3.205	0.00	100.1	0
3	未放电 Undischarged	2.896	3.206	2.896	3.207	0.00	100.0	0
4	未放电 Undischarged	2.866	3.206	2.865	3.207	0.03	100.0	0
5	未放电 Undischarged	2.890	3.205	2.890	3.206	0.00	100.0	0
6	未放电 Undischarged	2.870	3.206	2.869	3.207	0.03	100.0	0
7	未放电 Undischarged	2.873	3.203	2.873	3.205	0.00	100.1	0
8	未放电 Undischarged	2.871	3.204	2.870	3.206	0.03	100.1	0
9	未放电 Undischarged	2.878	3.206	2.877	3.208	0.03	100.1	0
10	未放电 Undischarged	2.868	3.205	2.868	3.206	0.00	100.0	0
11	完全放电 Fully Discharged	2.869	—	2.868	—	0.03	—	0
12	完全放电 Fully Discharged	2.845	—	2.844	—	0.04	—	0
13	完全放电 Fully Discharged	2.899	—	2.899	—	0.00	—	0
14	完全放电 Fully Discharged	2.838	—	2.838	—	0.00	—	0
15	完全放电 Fully Discharged	2.900	—	2.899	—	0.03	—	0
16	完全放电 Fully Discharged	2.878	—	2.878	—	0.00	—	0
17	完全放电 Fully Discharged	2.842	—	2.842	—	0.00	—	0
18	完全放电 Fully Discharged	2.863	—	2.863	—	0.00	—	0
19	完全放电 Fully Discharged	2.880	—	2.881	—	0.00	—	0
20	完全放电 Fully Discharged	2.892	—	2.892	—	0.00	—	0
备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, 0-无漏液, 无漏气, 无解体, 无破裂, 无起火 Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, 0-No leakage, no venting, no disassembly, no rupture & no fire.								

松下电器产业株式会社
检验报告

-----附表2

Panasonic Corporation

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Appendix 2

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序号 No.	T-2	检测项目名称 Name of Test Items		热测试检 Thermal test				
样品 号码 Sample No.	样品状态 Sample State	试检前 Before		试检后 After		质量 Loss (%)	剩余电压 Residual OCV (%)	其他 现象 Other Event
		质量 Mass (g)	开路电压 OCV (V)	质量 Mass (g)	开路电压 OCV (V)			
1	未放电 Undischarged	2.866	3.204	2.866	3.233	0.00	100.9	0
2	未放电 Undischarged	2.869	3.205	2.869	3.232	0.00	100.8	0
3	未放电 Undischarged	2.896	3.207	2.895	3.233	0.03	100.8	0
4	未放电 Undischarged	2.865	3.207	2.865	3.234	0.00	100.8	0
5	未放电 Undischarged	2.890	3.206	2.890	3.234	0.00	100.9	0
6	未放电 Undischarged	2.869	3.207	2.869	3.235	0.00	100.9	0
7	未放电 Undischarged	2.873	3.205	2.873	3.234	0.00	100.9	0
8	未放电 Undischarged	2.870	3.206	2.870	3.234	0.00	100.9	0
9	未放电 Undischarged	2.877	3.208	2.877	3.236	0.00	100.9	0
10	未放电 Undischarged	2.868	3.206	2.867	3.235	0.03	100.9	0
11	完全放电 Fully Discharged	2.868	—	2.868	—	0.00	—	0
12	完全放电 Fully Discharged	2.844	—	2.845	—	0.00	—	0
13	完全放电 Fully Discharged	2.899	—	2.899	—	0.00	—	0
14	完全放电 Fully Discharged	2.838	—	2.839	—	0.00	—	0
15	完全放电 Fully Discharged	2.899	—	2.899	—	0.00	—	0
16	完全放电 Fully Discharged	2.878	—	2.878	—	0.00	—	0
17	完全放电 Fully Discharged	2.842	—	2.843	—	0.00	—	0
18	完全放电 Fully Discharged	2.863	—	2.863	—	0.00	—	0
19	完全放电 Fully Discharged	2.881	—	2.880	—	0.03	—	0
20	完全放电 Fully Discharged	2.892	—	2.891	—	0.03	—	0
备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, 0-无漏液, 无漏气, 无解体, 无破裂, 无起火 Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, 0-No leakage, no venting, no disassembly, no rupture & no fire.								

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Appendix 3

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序号 No.	T-3	检测项目名称 Name of Test Items		振动试检 Vibration Test				
样品 号码 Sample No.	样品状态 Sample State	试检前 Before		试检后 After		质量 Mass Loss (%)	剩余电压 Residual OCV (%)	其他 现象 Other Event
		质量 Mass (g)	开路电压 OCV (V)	质量 Mass (g)	开路电压 OCV (V)			
1	未放电 Undischarged	2.866	3.233	2.865	3.245	0.03	100.4	0
2	未放电 Undischarged	2.869	3.232	2.868	3.244	0.03	100.4	0
3	未放电 Undischarged	2.895	3.233	2.895	3.243	0.00	100.3	0
4	未放电 Undischarged	2.865	3.234	2.865	3.248	0.00	100.4	0
5	未放电 Undischarged	2.890	3.234	2.890	3.246	0.00	100.4	0
6	未放电 Undischarged	2.869	3.235	2.869	3.245	0.00	100.3	0
7	未放电 Undischarged	2.873	3.234	2.872	3.245	0.03	100.3	0
8	未放电 Undischarged	2.870	3.234	2.870	3.245	0.00	100.3	0
9	未放电 Undischarged	2.877	3.236	2.877	3.250	0.00	100.4	0
10	未放电 Undischarged	2.867	3.235	2.867	3.246	0.00	100.3	0
11	完全放电 Fully Discharged	2.868	—	2.868	—	0.00	—	0
12	完全放电 Fully Discharged	2.845	—	2.845	—	0.00	—	0
13	完全放电 Fully Discharged	2.899	—	2.899	—	0.00	—	0
14	完全放电 Fully Discharged	2.839	—	2.839	—	0.00	—	0
15	完全放电 Fully Discharged	2.899	—	2.899	—	0.00	—	0
16	完全放电 Fully Discharged	2.878	—	2.878	—	0.00	—	0
17	完全放电 Fully Discharged	2.843	—	2.843	—	0.00	—	0
18	完全放电 Fully Discharged	2.863	—	2.863	—	0.00	—	0
19	完全放电 Fully Discharged	2.880	—	2.880	—	0.00	—	0
20	完全放电 Fully Discharged	2.891	—	2.891	—	0.00	—	0
备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, 0-无漏液, 无漏气, 无解体, 无破裂, 无起火 Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, 0-No leakage, no venting, no disassembly, no rupture & no fire.								

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-----附表4

Panasonic Corporation

No. CP0008-10

Appendix 4

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序号 No.	T-4	检测项目名称 Name of Test Items		冲击试检 Shock Test				
样品 号码 Sample No.	样品状态 Sample State	试检前 Before		试检后 After		质量 Loss (%)	剩余电压 Residual OCV (%)	其他 现象 Other Event
		质量 Mass (g)	开路电压 OCV (V)	质量 Mass (g)	开路电压 OCV (V)			
1	未放电 Undischarged	2.865	3.245	2.865	3.254	0.00	100.3	0
2	未放电 Undischarged	2.868	3.244	2.868	3.250	0.00	100.2	0
3	未放电 Undischarged	2.895	3.243	2.895	3.251	0.00	100.2	0
4	未放电 Undischarged	2.865	3.248	2.865	3.257	0.00	100.3	0
5	未放电 Undischarged	2.890	3.246	2.890	3.253	0.00	100.2	0
6	未放电 Undischarged	2.869	3.245	2.869	3.251	0.00	100.2	0
7	未放电 Undischarged	2.872	3.245	2.872	3.253	0.00	100.2	0
8	未放电 Undischarged	2.870	3.245	2.870	3.254	0.00	100.3	0
9	未放电 Undischarged	2.877	3.250	2.877	3.259	0.00	100.3	0
10	未放电 Undischarged	2.867	3.246	2.868	3.254	0.00	100.2	0
11	完全放电 Fully Discharged	2.868	—	2.868	—	0.00	—	0
12	完全放电 Fully Discharged	2.845	—	2.845	—	0.00	—	0
13	完全放电 Fully Discharged	2.899	—	2.899	—	0.00	—	0
14	完全放电 Fully Discharged	2.839	—	2.838	—	0.04	—	0
15	完全放电 Fully Discharged	2.899	—	2.899	—	0.00	—	0
16	完全放电 Fully Discharged	2.878	—	2.877	—	0.03	—	0
17	完全放电 Fully Discharged	2.843	—	2.844	—	0.00	—	0
18	完全放电 Fully Discharged	2.863	—	2.863	—	0.00	—	0
19	完全放电 Fully Discharged	2.880	—	2.879	—	0.03	—	0
20	完全放电 Fully Discharged	2.891	—	2.891	—	0.00	—	0
备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, 0-无漏液, 无漏气, 无解体, 无破裂, 无起火 Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, 0-No leakage, no venting, no disassembly, no rupture & no fire.								

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-----附表5

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Appendix 5

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序号 No.	T-5	检测项目名称 Name of Test Items	外短路试检 External short circuit
样品号码 Sample No.	样品状态 Sample State	样品表面最高温度 Max. External Temperature(°C)	其他现象 Other Event
1	未放电 Undischarged	62.6	0
2	未放电 Undischarged	60.8	0
3	未放电 Undischarged	60.4	0
4	未放电 Undischarged	61.6	0
5	未放电 Undischarged	63.2	0
6	未放电 Undischarged	63.3	0
7	未放电 Undischarged	60.8	0
8	未放电 Undischarged	61.4	0
9	未放电 Undischarged	61.6	0
10	未放电 Undischarged	60.1	0
11	完全放电 Fully Discharged	57.2	0
12	完全放电 Fully Discharged	56.9	0
13	完全放电 Fully Discharged	57.5	0
14	完全放电 Fully Discharged	56.8	0
15	完全放电 Fully Discharged	56.7	0
16	完全放电 Fully Discharged	57.3	0
17	完全放电 Fully Discharged	57.9	0
18	完全放电 Fully Discharged	56.5	0
19	完全放电 Fully Discharged	56.3	0
20	完全放电 Fully Discharged	56.8	0
备注: D-解体, R-破裂, F-起火, 0-无解体, 无破裂, 无起火 Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, 0-No leakage, no venting, no disassembly, no rupture & no fire.			

-----附表6

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-----附表7

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Appendix 7

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序号 No.	T-8	检测项目名称 Name of Test Items	强制放电试检 Forced Discharge
样品号码 Sample No.	样品状态 Sample State	试检现象 Event	
31	完全放电 Fully Discharged	0	
32	完全放电 Fully Discharged	0	
33	完全放电 Fully Discharged	0	
34	完全放电 Fully Discharged	0	
35	完全放电 Fully Discharged	0	
36	完全放电 Fully Discharged	0	
37	完全放电 Fully Discharged	0	
38	完全放电 Fully Discharged	0	
39	完全放电 Fully Discharged	0	
40	完全放电 Fully Discharged	0	

松下电器产业株式会社
检验报告パナソニック株式会社
オートモーティブ&インダストリアルシステムズ社
エナジーデバイス事業部

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样品名称 Name of Sample	中文 Chinese	锂电池 CR-2032L/BN			
	英文 English	Lithium Battery CR-2032L/BN			
送检单位 Consignor	松下电器产业株式会社/ Panasonic Corporation				
生产单位 Manufacturer	松下电器产业株式会社/ PT. Panasonic Gobel Energy Indonesia				
检验方法 Test Method	联合国《关于危险货物运输的建议书》 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS "				
判定标准 Criterion	联合国《关于危险货物运输的建议书》 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS "				
样品外观 Appearance	淡茶颜色直方形纸箱 Cardboard Box of Rectangular Solid of Light Brown				
检测起迄日期 Test Date	2014/11/27	样品编号 Sample No	/		
检测项目 Test Items	1.2米跌落试验、包装件毛重测试 1.2m Drop Test、Gross Weight Measure				
检验结论 Conclusion	受检样品通过所有项目检测，检测结果合格。 The sample has passed all of the testing items. 签发日期(date):2014年(y)11月(m) 28日(d)				
备注 Remark	/				
受检单位地址 Consignor Address	日本:大阪府守口市松下町1番1号 1-1 Matsushita-cho,Moriguchi City Osaka, Japan	邮政编码 Post Code	570-8511		

批准人职务(the title of approver):

■质量保证部长(Director of Quality Assurance)

□质量保证科长(Manager of Quality Assurance)

□质量保证主任工程师(Chief Engineer of QA)

批准 Approver:

J. Okamoto

审核 Checker:

主检 Appraiser:

S. Arita

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序号 No	检验项目名称 name of test items	标准要求或标准条款号 standard requirement or the clause number of standard	检测结果 test result		本项结论 test conclusion	备注 remark
1	1.2米 跌落试验 1.2m Drop Test	联合国《关于危险货物运输 的建议书规章范本》(15th) (以下简称：规章范本) (15th) 3.3章188条款 Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations(15th) (for short: UN Model Regulations) SPECIAL PROVISION 188	面跌落	包装未破裂，内装物完好。 The package is not cracked, and the contents are not damaged and not shifted.	合格 Passed	/
			棱跌落	包装未破裂，内装物完好。 The package is not cracked, and the contents are not damaged and not shifted.		
			角跌落	包装未破裂，内装物完好。 The package is not cracked, and the contents are not damaged and not shifted.		
2	包装件 毛重测试 Gross Weight Measure	规章范本 (15th) 3.3章188条款 UN Model Regulations(15th) SPECIAL PROVISION 188	Weight of 1box : 1.5kg(Gross)		合格 Passed	/
检验环境条件 test environment condition		环境温度： 25deg-C Ambient temperature: 25deg-C				
分包检验情况 Subcontracted test condition		检验项目 test item	/			
		分 包 实验室 Subcontracted Laboratory	名称 name	/	邮编 post code	/
			地址 address	/	电话 tel	/

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