Test Report

No.: TSNEC25000783401 **Date:** Mar 14, 2025

Client Name:

Client Address:

Sample Name: NI-MHRECHARGEABLE BATTERY

Client Ref. Information: NI-MH Cylindrical Rechargeable Battery:
NI-MH:AA100mAh AA150mAh AA200mAh AA250mAh AA300mAh AA350mAh AA400mAh AA450mAh AA500mAh AA600mAh AA700mAh AA800mAh AA900mAh AA1000mAh AA1100mAh AA1200mAh AA1300mAh AA1400mAh AA1500mAh AA1600mAh AA1700mAh AA1800mAh AA1900mAh AA2000mAh AA2100mAh AA2200mAh AA2300mAh AA2400mAh AA2500mAh AA2600mAh
NI-MH: AAA100mAh AAA150mAh AAA200mAh AAA250mAh AAA300mAh AAA350mAh AAA400mAh AAA450mAh AAA500mAh AAA600mAh AAA700mAh AAA800mAh AAA900mAh AAA1000mAh
NI-MH: 1/3AAA80mAh 1/3AAA100mAh 1/3AAA120mAh 1/3AAA150mAh 1/3AAA180mAh 1/3AAA200mAh
NI-MH: 2/3AA100mAh 2/3AA150mAh 2/3AA200mAh 2/3AA250mAh 2/3AA300mAh 2/3AA350mAh 2/3AA400mAh 2/3AA450mAh 2/3AA500mAh 2/3AA550mAh 2/3AA600mAh
NI-MH:2/3AAA100mAh 2/3AAA150mAh 2/3AAA200mAh 2/3AAA250mAh 2/3AAA300mAh 2/3AAA350mAH 2/3AAA400mAH 2/3AAA450mAh 2/3AAA500mAh 2/3AAA550mAh 2/3AAA600mAh
NI-MH:SC600mAh SC700mAh SC800mAh SC900mAh SC1000mAh SC1100mAh SC1200mAh SC1300mAh SC1400mAh SC1500mAh SC1600mAh SC1700mAh SC1800mAh SC1900mAh SC2000mAh SC2100mAh SC2200mAh SC2300mAh SC2400mAH SC2500mAh SC2600mAh SC2700mAh SC2800mAh SC2900mAh SC3000mAh
NI-MH:C1500mAh C1800mAh C2000mAh C2500mAh C3000mAh C3500mAh C4000mAh
NI-MH: D3000mAh D3500mAh D4000mAh D4500mAh D5000mAh D6000mAh D7000mAh D8000mAh
NI-MH Button Rechargeable Battery:
NI-MH:40mAh 60mAh 80mAh

(1.2V 2.4V 3.6V 4.8V 6.0V 7.2V 8.4V 9.6V 10.8V 12V),etc.

Sample Type: portable batteries (non portable zinc-air button cells)

The above sample(s) and information were provided by the client.

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Tianjin) Co., Ltd.

Reabeca Zhou
Approved Signatory

Scan to see the report

7B002F59

SGS Mansion, No.41, The 5th Avenue TEDA, Tianjin, China 300457 t (86-22) 65288000 www.sgsgroup.com.cn
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SGS Job No.: TJP25-001276
Sample Receiving Date: Mar 10, 2025
Testing Period: Mar 10, 2025 ~ Mar 13, 2025
Test Requested: Select test(s) as requested by the client.
Test Method(s): Please refer to next page(s).
Test Result(s): Please refer to next page(s).

Test Requirement	Conclusion
Annex I of Regulation (EU) 2023/1542– Heavy Metals Content in batteries and waste batteries	Pass
Statutory Instruments 2008 No. 2164 Environmental Protection in United Kingdom– The Batteries and Accumulators (Placing on the Market) Regulations 2008 (as amended) and the Waste Batteries and Accumulators Regulations 2009 (as amended) - Heavy Metals Content in Batteries and Accumulators	Pass

Test Result(s):

Test Part Description：

SN ID	Sample No.	SGS Sample ID	Description
SN1	A	TSN25-0007834-0001	green battery

Remarks:
(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated

Annex I of Regulation (EU) 2023/1542– Heavy Metals Content in batteries and waste batteries

Test Method: SGS In House Method, analysis was performed by ICP-OES or AAS or Hg-analyzer.

Test Item(s)	Limit	Unit(s)	MDL	A
Lead(Pb)	0.01	%	0.0010	ND
Cadmium(Cd)	0.002	%	0.0010	ND
Mercury(Hg)	0.0005	%	0.0001	ND
Conclusion				**Pass**

Notes:
(1) Restriction on substances

Column 1 Designation of the substance or group of substances	Column 2 Conditions of restriction
1. Mercury CAS No 7439-97-6 EC No 231-106-7 and its compounds	Batteries, whether or not incorporated into appliances, light means of transport or other vehicles, shall not contain more than 0,0005 % of mercury (expressed as mercury metal) by weight

2. Cadmium CAS No 7440-43-9 EC No 231-152-8 and its compounds	Portable batteries, whether or not incorporated into appliances, light means of transport or other vehicles, shall not contain more than 0,002 % of cadmium (expressed as cadmium metal) by weight
3. Lead CAS No 7439-92-1 EC No 231-100-4 and its compounds	1. From 18 August 2024, portable batteries, whether or not incorporated into appliances, shall not contain more than 0,01 % of lead (expressed as lead metal) by weight. 2. The restriction set out in point 1 shall not apply to portable zinc-air button cells until 18 August 2028.

(2) According to the EU New Battery Regulation (EU) 2023/1542, portable batteries (non portable zinc-air button cells) containing between 0,004 %-0.01 % lead, shall be marked with the chemical symbol for the metal concerned: Pb.

Statutory Instruments 2008 No. 2164 Environmental Protection in United Kingdom– The Batteries and Accumulators (Placing on the Market) Regulations 2008 (as amended) and the Waste Batteries and Accumulators Regulations 2009 (as amended) - Heavy Metals Content in Batteries and Accumulators

Test Method: SGS In House Method, analysis was performed by ICP-OES or AAS or Hg-analyzer.

Test Item(s)	Limit	Unit(s)	MDL	A
Lead(Pb)	-	%	0.0010	ND
Cadmium(Cd)	0.002	%	0.0010	ND
Mercury(Hg)	0.0005	%	0.0001	ND
Conclusion				**Pass**

Notes:
(1) Results shown are of total weight of the battery sample.
(2) According to the Statutory Instruments 2008 No. 2164 Environmental Protection in United Kingdom and its amendments, all types of battery shall include the chemical symbol Lead when containing more than 0.004% of Pb.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.

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Sample Photo:

The sample was not tested

The sample was not tested

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TSN25-0007834-0001

SGS authenticate the photo on original report only

*** End of Report ***

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Test Report issued under the responsibility of:

TEST REPORT
IEC 62133-1

Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 1: Nickel systems

Report Number. SHES250300353501

Date of issue..... 2025-03-12

Total number of pages 22

Applicant's name.....

Address.....

Test specification:

Standard ..... IEC 62133-1:2017

Test procedure ..... CB Scheme

Non-standard test method ..... N/A

Test Report Form No. ..... IEC62133_1A

Test Report Form(s) Originator.... TÜV SÜD

Master TRF..... Dated 2017-09-14

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description..... :	Ni-MH Cell
Trade Mark..... :	--
Manufacturer..... :	Same as applicant
Model/Type reference..... :	AAA100mAh, AAA150mAh, AAA200mAh, AAA250mAh, AAA300mAh, AAA400mAh, AAA500mAh, AAA600mAh, AAA800mAh
Ratings..... :	Rated Voltage: 1,2 V Rated Capacity: see page 8 for details.

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☒	**CB Testing Laboratory:**	SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.	
Testing location/ address.....:		588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China	
Tested by (name, function, signature) ..... :		Gina Yu / Project Engineer	Gina Yu
Approved by (name, function, signature) ..... :		Eric wang / Project Reviewer	
☐	**Testing procedure: CTF Stage 1:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 2:**	N/A	
Testing location/ address.....:			
Tested by (name + signature) .....:			
Witnessed by (name, function, signature)..:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 3:**	N/A	
☐	**Testing procedure: CTF Stage 4:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Witnessed by (name, function, signature)..:			
Approved by (name, function, signature)...:			
Supervised by (name, function, signature) :			

List of Attachments (including a total number of pages in each attachment):

Attachment 1: 9 pages of Photos;

Attachment 2: 1 page of Information for safety;

Attachment 3: 1 page of Packaging;

Attachment 4: 10 pages of Product specification.

Summary of testing:

The sample(s) tested complies with the requirements of IEC 62133-1:2017.

No decision rule is specified by standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

All test data in this report were copied from SGS CB test report No. SHES240300504301, CB certificate No.: BE-47683, with following changes and/or additions:

1. Update the date of report and certificate;
2. Update marking plate;
3. Update photos of cell.

After comparison, no additional tests were necessary.

Remark:

1. Only cell was considered and tested according to standard in this report;
2. For these series of models, full tests were conducted on model 'AAA800mAh', partial tests per clause 7.3.2, 7.3.5, 7.3.6, 7.3.8, 7.3.9 were conducted on model 'AAA100mAh', 'AAA150mAh', 'AAA200mAh', 'AAA250mAh', 'AAA300mAh', 'AAA400mAh', 'AAA500mAh' and 'AAA600mAh'.

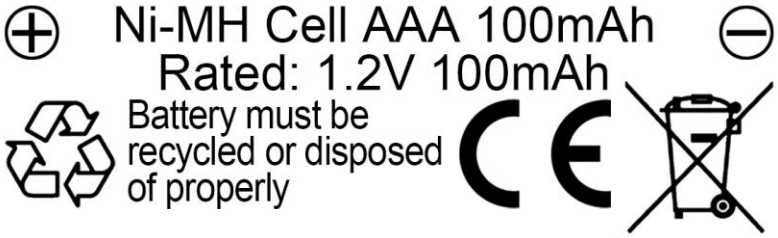
Tests performed (name of test and test clause):	**Testing location:**
☐ 5.2 Insulation resistance ☒ 7.2.1 Continuous low-rate charging (cells) ☒ 7.2.2 Vibration ☐ 7.2.3 Case stress at high ambient temperature (batteries) ☒ 7.2.4 Temperature cycling ☒ 7.3.1 Incorrect installation (cells) ☒ 7.3.2 External short circuit ☒ 7.3.3 Free fall ☒ 7.3.4 Mechanical shock (crash hazard) ☒ 7.3.5 Thermal abuse (cells) ☒ 7.3.6 Crushing of cells ☒ 7.3.7 Low pressure (cells) ☒ 7.3.8 Overcharge ☒ 7.3.9 Forced discharge (cells)	SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. 588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Summary of compliance with National Differences (List of countries addressed):none

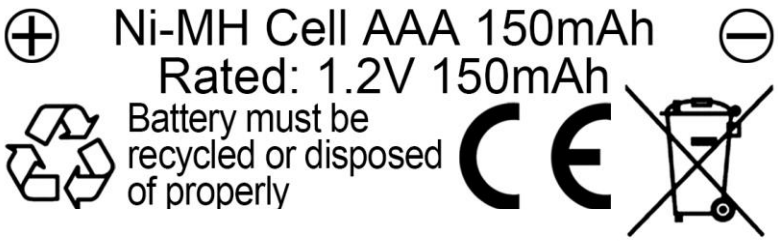
☒ The product fulfils the requirements of EN 62133-1:2017 and BS EN 62133-1:2017.

Copy of marking plate

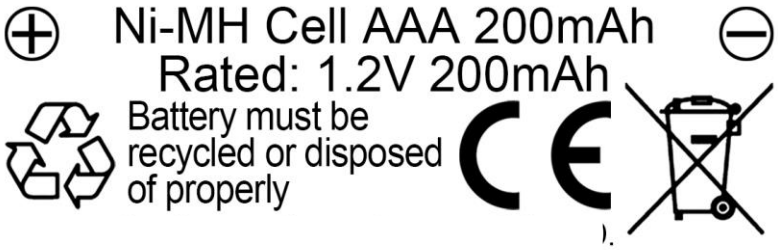
The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective National Certification Body that own these marks.



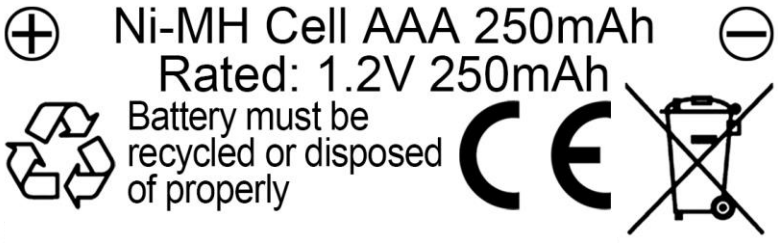
YYYY-MM-DD



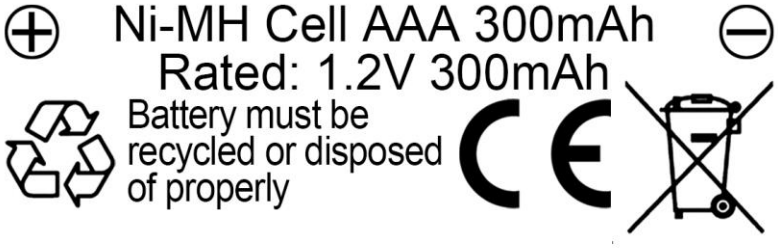
YYYY-MM-DD



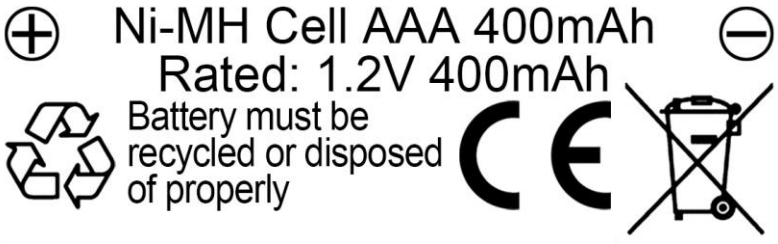
YYYY-MM-DD



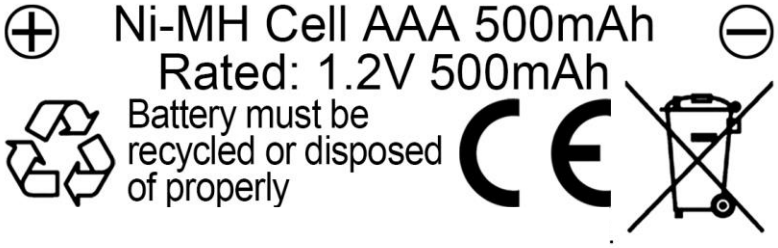
YYYY-MM-DD



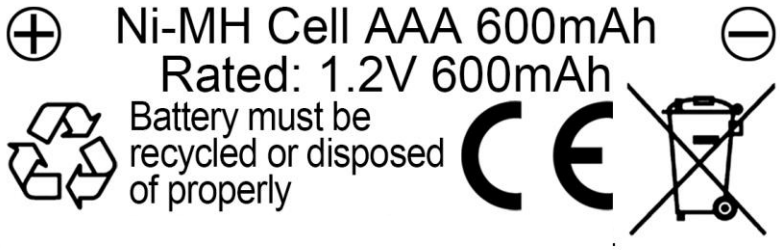
YYYY-MM-DD



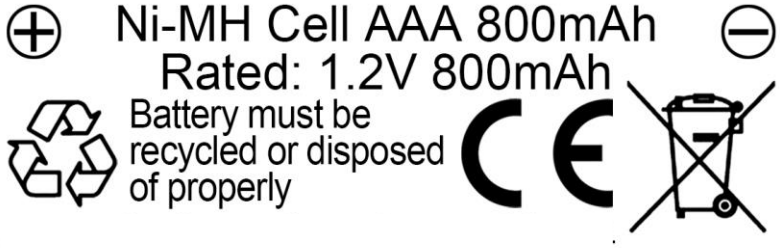
YYYY-MM-DD



YYYY-MM-DD



YYYY-MM-DD



YYYY-MM-DD

Remark: “YYYY-MM-DD’ represents the manufacturing date: ‘YYYY’ represents the year, ‘MM’ represents the month, ‘DD’ represents the day.

Test item particulars .....:	--
Classification of installation and use.....:	--
Supply connection .....:	--
Recommend charging method declared by the manufacturer .....:	CC
Discharge current (0,2 I_t A) .....:	See page 8 for detail
Specified final voltage.....:	1 V
Chemistry .....:	Nickel Systems
Possible test case verdicts:	
- test case does not apply to the test object..... :	N/A
- test object does meet the requirement..... :	P (Pass)
- test object does not meet the requirement..... :	F (Fail)
Testing ..... :	
Date of receipt of test item..... :	2025-03-04
Date (s) of performance of tests ..... :	Original: 2021-11-09 to 2021-12-08

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
"(See Enclosure #)" refers to additional information appended to the report.
"(See appended table)" refers to a table appended to the report.

Throughout this report a ☒ comma / ☐ point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:	☐ **Yes** ☒ **Not applicable**
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)..... : Same as applicant	

General product information:

Model No.	Rated voltage:	Rated Capacity:	Standard charge current	Standard discharge current
AAA100mAh	1,2 Vd.c.	100 mAh	10 (0,1 C) mA	20 (0,2 C) mA
AAA150mAh	1,2 Vd.c.	150 mAh	15 (0,1 C) mA	30 (0,2 C) mA
AAA200mAh	1,2 Vd.c.	200 mAh	20 (0,1 C) mA	40 (0,2 C) mA
AAA250mAh	1,2 Vd.c.	250 mAh	25 (0,1 C) mA	50 (0,2 C) mA
AAA300mAh	1,2 Vd.c.	300 mAh	30 (0,1 C) mA	60 (0,2 C) mA
AAA400mAh	1,2 Vd.c.	400 mAh	40 (0,1 C) mA	80 (0,2 C) mA
AAA500mAh	1,2 Vd.c.	500 mAh	50 (0,1 C) mA	100 (0,2 C) mA
AAA600mAh	1,2 Vd.c.	600 mAh	60 (0,1 C) mA	120 (0,2 C) mA
AAA800mAh	1,2 Vd.c.	800 mAh	80 (0,1 C) mA	160 (0,2 C) mA

Remark:

All models have same dimensions, construction and composition, except for model No. and rated capacity.

IEC 62133-1			
Clause	Requirement + Test	Result - Remark	Verdict
4	**Parameter measurement tolerances**		**P**
	Parameter measurement tolerances		P
5	**General safety considerations**		**P**
5.1	General		P
5.2	Insulation and wiring	Cell only.	N/A
	The insulation resistance between the positive terminal and externally exposed metal surfaces of the battery (excluding electrical contact surfaces) is not less than 5 MΩ		N/A
	Insulation resistance (MΩ) ..... :		—
	Internal wiring and insulation are sufficient to withstand maximum anticipated current, voltage and temperature requirements		N/A
	Orientation of wiring maintains adequate creepage and clearance distances between conductors		N/A
	Mechanical integrity of internal connections accommodates reasonably foreseeable misuse		N/A
5.3	Venting		P
	Battery cases and cells incorporate a pressure relief mechanism or are constructed so that they relieve excessive internal pressure at a value and rate that will preclude rupture, explosion and self-ignition	A pressure relief mechanism used to relieve excessive internal pressure.	P
	Encapsulation used to support cells within an outer casing does not cause the battery to overheat during normal operation nor inhibit pressure relief		N/A
5.4	Temperature, voltage and current management	Cell only.	N/A
	Batteries are designed such that abnormal temperature-rise conditions are prevented		N/A
	Batteries are designed to be within temperature, voltage and current limits specified by the cell manufacturer		N/A
	Batteries are provided with specifications and charging instructions for equipment manufacturers so that associated chargers are designed to maintain charging within the temperature, voltage and current limits specified		N/A
5.5	Terminal contacts	Cell Only	N/A
	The size and shape of the terminal contacts ensure that they can carry the maximum anticipated current		N/A
	External terminal contact surfaces are formed from conductive materials with good mechanical strength and corrosion resistance		N/A

IEC 62133-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Terminal contacts are arranged to minimize the risk of short circuits		N/A
5.6	Assembly of cells into batteries	Cell only.	N/A
5.6.1	If there is more than one battery housed in a single battery case, cells used in the assembly of each battery have closely matched capacities, be of the same design, be of the same chemistry and be from the same manufacturer		N/A
	Battery has some type of safety device or feature for charging.		N/A
	Manufacturers of cells specify current, voltage and temperature limits so that the battery manufacturer /designer may ensure proper design and assembly		N/A
	Batteries that are designed for the selective discharge of a portion of their series connected cells incorporate circuitry to prevent operation of cells outside the limits specified by the cell manufacturer		N/A
	Protective circuit components are added as appropriate and consideration given to the end-device application		N/A
	When testing a battery, the manufacturer of the battery provides a test report confirming the compliance according to this document		N/A
5.7	Quality plan		P
	The manufacturer prepares and implements a quality plan that defines procedures for the inspection of materials, components, cells and batteries and which covers the whole process of producing each type of cell or battery	Self-declaration was submitted.	P
6	**Type test and sample size**		**P**
	Tests were made with the number of cells or batteries specified in Table 1 using cells or batteries that are not more than six months old	Tests are performed according to specified in table 1 of the standard. The samples are not more than 6 months old.	P
	Unless noted otherwise in the test methods, testing was conducted in an ambient of 20°C ± 5°C.	The tests are conducted in an ambient of 20°C ± 5°C.	P
7	**Specific requirements and tests**		**P**
7.1	Charging procedure for test purposes		P
7.2	Intended use		P
7.2.1	Continuous low-rate charging (cells)		P
	Results: No fire. No explosion	(See Table 7.2.1)	P
7.2.2	Vibration		P

IEC 62133-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Results: No fire. No explosion. No leakage	(See Table 7.2.2)	P
7.2.3	Case stress at high ambient temperature(batteries)	Cell only	N/A
	Oven temperature (°C) ..... :		—
	Results: No physical distortion of the battery case resulting in exposure of internal protective components and cells		N/A
7.2.4	Temperature cycling		P
	Results: No fire. No explosion. No leakage.		P
7.3	Reasonably foreseeable misuse		P
7.3.1	Incorrect installation (cells)		P
	The test was carried out using: - Four fully charged cells of the same brand, type, size and age connected in series, with one of them reversed; or	Four fully charged cells in series with one of the four cells reversed. Retest five times with different samples.	P
	- A stabilized dc power supply.		N/A
	Results: No fire. No explosion .....:	(See Table 7.3.1)	P
7.3.2	External short circuit		P
	The cells or batteries were tested until one of the following occurred: - 24 hours elapsed; or		N/A
	- The case temperature declined by 20% of the maximum temperature rise		P
	Results: No fire. No explosion .....:	(See Table 7.3.2)	P
7.3.3	Free fall		P
	Results: No fire. No explosion.		P
7.3.4	Mechanical shock (crash hazard)		P
	Results: No fire. No explosion. No leakage.		P
7.3.5	Thermal abuse (cells)		P
	Oven temperature (°C) ..... :	130 °C.	—
	Results: No fire. No explosion.		P
7.3.6	Crushing of cells		P
	The crushing force was released upon: - The maximum force of 13 kN ± 0.78 kN has been applied; or		P
	- An abrupt voltage drop of one-third of the original voltage has been obtained		N/A
	The cell is prismatic type and a second set of samples was tested, rotated 90° around longitudinal axis compared to the first set		N/A
	Results: No fire. No explosion .....:		P
7.3.7	Low pressure (cells)		P

IEC 62133-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Chamber pressure (kPa)..... :	11,6	—
	Results: No fire. No explosion. No leakage.		P
7.3.8	Overcharge		P
	Results: No fire. No explosion .....:	(See Table 7.3.8)	P
7.3.9	Forced discharge		P
	Results: No fire. No explosion .....:	(See Table 7.3.9)	P
8	**Information for safety**		**P**
8.1	General		P
	The manufacturer of secondary cells ensures that information is provided about current, voltage and temperature limits of their products.	See Attachment 4 for detail.	P
	The manufacturer of batteries ensures that equipment manufacturers and, in the case of direct sales, end-users are provided with information to minimize and mitigate hazards.	Cell only.	N/A
	Systems analyses performed by device manufacturers to ensure that a particular battery design prevents hazards from occurring during use of a product		N/A
	As appropriate, information relating to hazard avoidance resulting from a system analysis is provided to the end user .....:		N/A
	Guidance is provided in IEC TR 62188 on the design are provided for information in Annex A and Annex B.		P
8.2	Small cell and battery safety information	Small cell	P
	The following warning language is to be provided with the information packaged with the small cells and batteries or equipment using them:		P
	-Keep small cells and batteries which are considered swallowable out of the reach of children.		P
	-Swallowing may lead to burns, perforation of soft tissue, and death. Severe burns can occur within 2h of ingestion.		P
	-In case of ingestion of a cell or battery, seek medical assistance promptly.		P
9	**Marking**		**P**
9.1	Cell marking	See marking plate for detail	P
	Cells marked as specified in the applicable cell standards: IEC 61951-1 or IEC 61951-2.		P

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Clause	Requirement + Test	Result - Remark	Verdict
	By agreement between the cell manufacturer and the battery and/or end product manufacturer, component cells used in the manufacture of a battery need not be marked.		N/A
	However, cell marking can be indicated with the battery, the instructions and/or the specifications.		N/A
9.2	Battery marking	Cell only.	N/A
	Batteries marked as specified in the applicable cell standards: IEC 61951-1 or IEC 61951-2.		N/A
	Batteries marked with an appropriate caution statement.		N/A
	Terminals have clear polarity marking on the external surface of the battery.		N/A
	Batteries with keyed external connector need not be marked with polarity markings if the design of the external connector prevents reverse polarity connections		N/A
9.3	Caution for ingestion of small cells and batteries		P
	Small cells and batteries determined to be small are including a caution statement regarding the hazards of ingestion in accordance with 8.2.		P
	Small cells and batteries are intended for direct sale in consumer-replaceable applications, caution for ingestion are given on the immediate package.	Not be intended for direct sale in consumer-replaceable applications.	N/A
9.4	Other information	Cell Only	N/A
	Storage and disposal instructions marked on or supplied with the battery.		N/A
	Recommended charging instructions marked on or supplied with the battery.		N/A

10	**Packaging**		**P**
	Packaging for button cells are not be small enough to fit within the limits of the ingestion gauge of Figure 2		N/A
	Annex C for information regarding packaging	See Attachment 3 for detail.	P

Annex A (informative)	**Recommendations to equipment manufacturers and battery assemblers**	**P**
Annex B (informative)	**Recommendations to the end-users**	N/A
Annex C (informative)	**Packaging**	**P**

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Clause	Requirement + Test	Result - Remark	Verdict

	TABLE: Critical components information				P
Object/part no.	**Manufacturer/ trademark**	**Type/model**	**Technical data**	**Standard**	**Mark(s) of conformity [1)]**
Cell		See page 8 details	See page 8 details	IEC 62133-1:2017 EN 62133-1: 2017	Tested with appliance
- Electrolyte	Xinxiang Delu Material Co., Ltd	KOH	1,3 g/ml	--	--
- Separator	Henan Kegao Radiation Chemical Technology Co., Ltd.	Nylon	The absorption≥200%	--	--
- Anode	Ningbo Shenjiang Technology Co., Ltd.	Alloy Powder	≥300 mAh/g	--	--
- Cathode	Jiangmen Chancsun Umicore Industry Co., Ltd.	Nicky Hydroxide	≥250 mAh/g	--	--
Supplementary information: **[1)] Provided evidence ensures the agreed level of compliance. See OD-CB2039.**					

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Clause	Requirement + Test	Result - Remark	Verdict

7.2.1	TABLE: Continuous low rate charge (cells)				P
Model	**Recommended charging method, (CC, CV, or CC/CV)**	**Recommended charging voltage V_c, (Vdc)**	**Recommended charging current I_{rec}, (A)**	**OCV at start of test, (Vdc)**	**Results**
Cell: AAA800mAh (#1)	CC	--	0,08	1,394	Pass
Cell: AAA800mAh (#2)	CC	--	0,08	1,393	Pass
Cell: AAA800mAh (#3)	CC	--	0,08	1,392	Pass
Cell: AAA800mAh (#4)	CC	--	0,08	1,391	Pass
Cell: AAA800mAh (#5)	CC	--	0,08	1,393	Pass

Supplementary information:
- No fire or explosion

7.2.2	TABLE: Vibration		P
Model	**OCV at start of test, (Vdc)**	**Results**	
Cell: AAA800mAh (#6)	1,396	Pass	
Cell: AAA800mAh (#7)	1,394	Pass	
Cell: AAA800mAh (#8)	1,394	Pass	
Cell: AAA800mAh (#9)	1,395	Pass	
Cell: AAA800mAh (#10)	1,393	Pass	

Supplementary information:
- No fire or explosion
- No leakage

7.3.1	TABLE: Incorrect installation (cells)		P
Model	**OCV of reversed cell, (Vdc)**	**Results**	
Cell: AAA800mAh (#16, 17, 18, 19)	1,393	Pass	
Cell: AAA800mAh (#20, 21, 22, 23)	1,394	Pass	
Cell: AAA800mAh (#24, 25, 26, 27)	1,397	Pass	
Cell: AAA800mAh (#28, 29, 30, 31)	1,395	Pass	
Cell: AAA800mAh (#32, 33, 34, 35)	1,396	Pass	

Supplementary information:
- No fire or explosion
- Sample no. 19, 23, 27, 31, 35 are reversed cell

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Clause	Requirement + Test	Result - Remark	Verdict

7.3.2	TABLE: External short circuit					P
Model	**Ambient (at 20°C ± 5°C or 55°C ± 5°C)**	**OCV at start of test, (Vdc)**	**Resistance of circuit, (Ω)**	**Maximum case temperature rise ΔT, (°C)**	**Results**	
Cell: AAA100mAh (#36)	23,2	1,349	0,084	31,4	Pass	
Cell: AAA100mAh (#37)	23,2	1,344	0,087	34,4	Pass	
Cell: AAA100mAh (#38)	23,2	1,350	0,085	32,9	Pass	
Cell: AAA100mAh (#39)	23,2	1,352	0,084	28,9	Pass	
Cell: AAA100mAh (#40)	23,2	1,348	0,083	31,8	Pass	
Cell: AAA100mAh (#41)	53,0	1,344	0,084	30,5	Pass	
Cell: AAA100mAh (#42)	53,0	1,351	0,083	18,4	Pass	
Cell: AAA100mAh (#43)	53,0	1,350	0,084	25,3	Pass	
Cell: AAA100mAh (#44)	53,0	1,347	0,086	18,6	Pass	
Cell: AAA100mAh (#45)	53,0	1,349	0,087	30,1	Pass	
Cell: AAA150mAh (#46)	23,5	1,405	0,085	37,3	Pass	
Cell: AAA150mAh (#47)	23,5	1,406	0,082	42,9	Pass	
Cell: AAA150mAh (#48)	23,5	1,399	0,087	37,8	Pass	
Cell: AAA150mAh (#49)	23,5	1,398	0,083	37,3	Pass	
Cell: AAA150mAh (#50)	23,5	1,400	0,084	38,7	Pass	
Cell: AAA150mAh (#51)	54,0	1,401	0,083	37,9	Pass	
Cell: AAA150mAh (#52)	54,0	1,405	0,087	37,2	Pass	
Cell: AAA150mAh (#53)	54,0	1,404	0,085	32,0	Pass	
Cell: AAA150mAh (#54)	54,0	1,408	0,085	27,2	Pass	
Cell: AAA150mAh (#55)	54,0	1,394	0,082	26,5	Pass	
Cell: AAA200mAh (#56)	22,7	1,384	0,086	38,9	Pass	
Cell: AAA200mAh (#57)	22,7	1,385	0,083	37,9	Pass	
Cell: AAA200mAh (#58)	22,7	1,384	0,085	42,1	Pass	
Cell: AAA200mAh (#59)	22,7	1,385	0,084	42,2	Pass	
Cell: AAA200mAh (#60)	22,7	1,384	0,085	40,4	Pass	
Cell: AAA200mAh (#61)	55,4	1,387	0,081	36,3	Pass	
Cell: AAA200mAh (#62)	55,4	1,385	0,082	32,0	Pass	
Cell: AAA200mAh (#63)	55,4	1,382	0,085	36,0	Pass	
Cell: AAA200mAh (#64)	55,4	1,380	0,082	37,8	Pass	
Cell: AAA200mAh (#65)	55,4	1,383	0,084	35,1	Pass	
Cell: AAA250mAh (#66)	23,4	1,389	0,086	43,8	Pass	

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Clause	Requirement + Test	Result - Remark	Verdict

Cell: AAA250mAh (#67)	23,4	1,391	0,083	36,6	Pass
Cell: AAA250mAh (#68)	23,4	1,388	0,085	43,4	Pass
Cell: AAA250mAh (#69)	23,4	1,387	0,084	47,3	Pass
Cell: AAA250mAh (#70)	23,4	1,387	0,083	46,9	Pass
Cell: AAA250mAh (#71)	55,3	1,388	0,086	38,6	Pass
Cell: AAA250mAh (#72)	55,3	1,385	0,084	25,6	Pass
Cell: AAA250mAh (#73)	55,3	1,385	0,083	38,1	Pass
Cell: AAA250mAh (#74)	55,3	1,386	0,082	38,7	Pass
Cell: AAA250mAh (#75)	55,3	1,389	0,083	37,4	Pass
Cell: AAA300mAh (#76)	24,0	1,400	0,085	41,1	Pass
Cell: AAA300mAh (#77)	24,0	1,389	0,083	49,1	Pass
Cell: AAA300mAh (#78)	24,0	1,400	0,083	39,3	Pass
Cell: AAA300mAh (#79)	24,0	1,401	0,087	52,1	Pass
Cell: AAA300mAh (#80)	24,0	1,401	0,086	47,0	Pass
Cell: AAA300mAh (#81)	53,6	1,396	0,082	39,2	Pass
Cell: AAA300mAh (#82)	53,6	1,380	0,088	38,0	Pass
Cell: AAA300mAh (#83)	53,6	1,379	0,084	36,9	Pass
Cell: AAA300mAh (#84)	53,6	1,400	0,083	23,8	Pass
Cell: AAA300mAh (#85)	53,6	1,403	0,085	37,2	Pass
Cell: AAA400mAh (#86)	22,8	1,346	0,085	43,7	Pass
Cell: AAA400mAh (#87)	22,8	1,344	0,083	45,3	Pass
Cell: AAA400mAh (#88)	22,8	1,348	0,085	51,0	Pass
Cell: AAA400mAh (#89)	22,8	1,348	0,084	37,1	Pass
Cell: AAA400mAh (#90)	22,8	1,346	0,084	50,0	Pass
Cell: AAA400mAh (#91)	54,4	1,345	0,085	36,3	Pass
Cell: AAA400mAh (#92)	54,4	1,344	0,082	23,7	Pass
Cell: AAA400mAh (#93)	54,4	1,348	0,084	33,2	Pass
Cell: AAA400mAh (#94)	54,4	1,346	0,087	23,7	Pass
Cell: AAA400mAh (#95)	54,4	1,344	0,085	37,4	Pass
Cell: AAA500mAh (#96)	23,6	1,384	0,086	52,8	Pass
Cell: AAA500mAh (#97)	23,6	1,383	0,082	55,6	Pass
Cell: AAA500mAh (#98)	23,6	1,382	0,082	54,4	Pass
Cell: AAA500mAh (#99)	23,6	1,380	0,085	39,3	Pass
Cell: AAA50MAH (#100)	23,6	1,384	0,084	53,7	Pass
Cell: AAA500mAh (#101)	54,2	1,385	0,083	45,3	Pass
Cell: AAA500mAh (#102)	54,2	1,383	0,086	33,8	Pass

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Clause	Requirement + Test	Result - Remark	Verdict

Cell: AAA500mAh (#103)	54,2	1,386	0,085	45,3	Pass
Cell: AAA500mAh (#104)	54,2	1,384	0,085	46,2	Pass
Cell: AAA500mAh (#105)	54,2	1,388	0,082	44,1	Pass
Cell: AAA600mAh (#106)	23,7	1,394	0,083	59,9	Pass
Cell: AAA600mAh (#107)	23,7	1,396	0,085	61,0	Pass
Cell: AAA600mAh (#108)	23,7	1,396	0,081	64,9	Pass
Cell: AAA600mAh (#109)	23,7	1,395	0,082	60,5	Pass
Cell: AAA600mAh (#110)	23,7	1,398	0,084	63,5	Pass
Cell: AAA600mAh (#111)	54,0	1,396	0,084	46,0	Pass
Cell: AAA600mAh (#112)	54,0	1,394	0,083	35,0	Pass
Cell: AAA600mAh (#113)	54,0	1,394	0,086	47,4	Pass
Cell: AAA600mAh (#114)	54,0	1,395	0,086	48,6	Pass
Cell: AAA600mAh (#115)	54,0	1,397	0,087	45,4	Pass
Cell: AAA800mAh (#116)	22,8	1,394	0,084	70,0	Pass
Cell: AAA800mAh (#117)	22,8	1,393	0,083	72,2	Pass
Cell: AAA800mAh (#118)	22,8	1,393	0,083	70,2	Pass
Cell: AAA800mAh (#119)	22,8	1,393	0,085	72,7	Pass
Cell: AAA800mAh (#120)	22,8	1,395	0,088	73,0	Pass
Cell: AAA800mAh (#121)	54,3	1,396	0,085	46,0	Pass
Cell: AAA800mAh (#122)	54,3	1,395	0,084	25,6	Pass
Cell: AAA800mAh (#123)	54,3	1,394	0,085	40,2	Pass
Cell: AAA800mAh (#124)	54,3	1,393	0,085	25,0	Pass
Cell: AAA800mAh (#125)	54,3	1,396	0,087	47,9	Pass
Supplementary information: - No fire or explosion					

7.3.6	TABLE: Crush		P
Model	OCV at start of test, (Vdc)	OCV at removal of crushing force, (Vdc)	Results
Cell: AAA100mAh (#179)	1,346	1,345	Pass
Cell: AAA100mAh (#180)	1,345	1,345	Pass
Cell: AAA100mAh (#181)	1,345	1,345	Pass
Cell: AAA100mAh (#182)	1,344	1,344	Pass
Cell: AAA100mAh (#183)	1,346	1,346	Pass
Cell: AAA150mAh (#184)	1,402	1,401	Pass
Cell: AAA150mAh (#185)	1,401	1,401	Pass
Cell: AAA150mAh (#186)	1,399	1,397	Pass

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Clause	Requirement + Test	Result - Remark	Verdict

Cell: AAA150mAh (#187)	1,399	1,397	Pass
Cell: AAA150mAh (#188)	1,398	1,398	Pass
Cell: AAA200mAh (#189)	1,384	1,384	Pass
Cell: AAA200mAh (#190)	1,383	1,381	Pass
Cell: AAA200mAh (#191)	1,386	1,385	Pass
Cell: AAA200mAh (#192)	1,385	1,385	Pass
Cell: AAA200mAh (#193)	1,384	1,384	Pass
Cell: AAA250mAh (#194)	1,394	1,392	Pass
Cell: AAA250mAh (#195)	1,396	1,395	Pass
Cell: AAA250mAh (#196)	1,395	1,395	Pass
Cell: AAA250mAh (#197)	1,396	1,396	Pass
Cell: AAA250mAh (#198)	1,393	1,392	Pass
Cell: AAA300mAh (#199)	1,400	1,399	Pass
Cell: AAA300mAh (#200)	1,401	1,400	Pass
Cell: AAA300mAh (#201)	1,389	1,387	Pass
Cell: AAA300mAh (#202)	1,378	1,375	Pass
Cell: AAA300mAh (#203)	1,390	1,388	Pass
Cell: AAA400mAh (#204)	1,344	1,343	Pass
Cell: AAA400mAh (#205)	1,343	1,343	Pass
Cell: AAA400mAh (#206)	1,346	1,345	Pass
Cell: AAA400mAh (#207)	1,345	1,345	Pass
Cell: AAA400mAh (#208)	1,344	1,344	Pass
Cell: AAA500mAh (#209)	1,382	1,380	Pass
Cell: AAA500mAh (#210)	1,384	1,383	Pass
Cell: AAA500mAh (#211)	1,386	1,385	Pass
Cell: AAA500mAh (#212)	1,383	1,383	Pass
Cell: AAA500mAh (#213)	1,385	1,385	Pass
Cell: AAA600mAh (#214)	1,396	1,394	Pass
Cell: AAA600mAh (#215)	1,393	1,393	Pass
Cell: AAA600mAh (#216)	1,395	1,394	Pass
Cell: AAA600mAh (#217)	1,394	1,394	Pass
Cell: AAA600mAh (#218)	1,395	1,395	Pass
Cell: AAA800mAh (#219)	1,392	1,390	Pass
Cell: AAA800mAh (#220)	1,394	1,393	Pass
Cell: AAA800mAh (#221)	1,393	1,393	Pass
Cell: AAA800mAh (#222)	1,395	1,394	Pass

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Clause	Requirement + Test	Result - Remark	Verdict

Cell: AAA800mAh (#223)	1,392	1,392	Pass

Supplementary information:
- No fire or explosion

7.3.8 TABLE: Overcharge **P**

Model	OCV prior to charging, (Vdc)	Maximum charge current, (A)	Time for charging, (hours)	Results
Cell: AAA100mAh (#227)	1,181	0,025	10	Pass
Cell: AAA100mAh (#228)	1,183	0,025	10	Pass
Cell: AAA100mAh (#229)	1,182	0,025	10	Pass
Cell: AAA100mAh (#230)	1,184	0,025	10	Pass
Cell: AAA100mAh (#231)	1,180	0,025	10	Pass
Cell: AAA150mAh (#232)	1,152	0,0375	10	Pass
Cell: AAA150mAh (#233)	1,153	0,0375	10	Pass
Cell: AAA150mAh (#234)	1,151	0,0375	10	Pass
Cell: AAA150mAh (#235)	1,152	0,0375	10	Pass
Cell: AAA150mAh (#236)	1,150	0,0375	10	Pass
Cell: AAA200mAh (#237)	1,173	0,05	10	Pass
Cell: AAA200mAh (#238)	1,174	0,05	10	Pass
Cell: AAA200mAh (#239)	1,175	0,05	10	Pass
Cell: AAA200mAh (#240)	1,173	0,05	10	Pass
Cell: AAA200mAh (#241)	1,171	0,05	10	Pass
Cell: AAA250mAh (#242)	1,153	0,0625	10	Pass
Cell: AAA250mAh (#243)	1,151	0,0625	10	Pass
Cell: AAA250mAh (#244)	1,155	0,0625	10	Pass
Cell: AAA250mAh (#245)	1,152	0,0625	10	Pass
Cell: AAA250mAh (#246)	1,150	0,0625	10	Pass
Cell: AAA300mAh (#247)	1,174	0,075	10	Pass
Cell: AAA300mAh (#248)	1,177	0,075	10	Pass
Cell: AAA300mAh (#249)	1,176	0,075	10	Pass
Cell: AAA300mAh (#250)	1,177	0,075	10	Pass
Cell: AAA300mAh (#251)	1,181	0,075	10	Pass
Cell: AAA400mAh (#252)	1,171	0,1	10	Pass
Cell: AAA400mAh (#253)	1,170	0,1	10	Pass
Cell: AAA400mAh (#254)	1,170	0,1	10	Pass
Cell: AAA400mAh (#255)	1,171	0,1	10	Pass

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Clause	Requirement + Test	Result - Remark	Verdict

Cell: AAA400mAh (#256)	1,172	0,1	10	Pass
Cell: AAA500mAh (#257)	1,157	0,125	10	Pass
Cell: AAA500mAh (#258)	1,156	0,125	10	Pass
Cell: AAA500mAh (#259)	1,155	0,125	10	Pass
Cell: AAA500mAh (#260)	1,154	0,125	10	Pass
Cell: AAA500mAh (#261)	1,158	0,125	10	Pass
Cell: AAA600mAh (#262)	1,173	0,15	10	Pass
Cell: AAA600mAh (#263)	1,172	0,15	10	Pass
Cell: AAA600mAh (#264)	1,171	0,15	10	Pass
Cell: AAA600mAh (#265)	1,172	0,15	10	Pass
Cell: AAA600mAh (#266)	1,175	0,15	10	Pass
Cell: AAA800mAh (#267)	1,123	0,2	10	Pass
Cell: AAA800mAh (#268)	1,126	0,2	10	Pass
Cell: AAA800mAh (#269)	1,124	0,2	10	Pass
Cell: AAA800mAh (#270)	1,125	0,2	10	Pass
Cell: AAA800mAh (#271)	1,128	0,2	10	Pass

Supplementary information:

- No fire or explosion

Note: The recommended charging current declared by the manufacturer is 0,1C. The test duration is 10 hours [t=2,5*C/(2,5*0,1C)].

7.3.9	TABLE: Forced discharge (cells)			P
Model	**OCV before application of reverse charge, (Vdc)**	**Measured reverse charge I_t, (A)**	**Time for reversed charge, (minutes)**	**Results**
Cell: AAA100mAh (#272)	1,181	0,1	90	Pass
Cell: AAA100mAh (#273)	1,183	0,1	90	Pass
Cell: AAA100mAh (#274)	1,182	0,1	90	Pass
Cell: AAA100mAh (#275)	1,184	0,1	90	Pass
Cell: AAA100mAh (#276)	1,182	0,1	90	Pass
Cell: AAA150mAh (#277)	1,151	0,15	90	Pass
Cell: AAA150mAh (#278)	1,150	0,15	90	Pass
Cell: AAA150mAh (#279)	1,152	0,15	90	Pass
Cell: AAA150mAh (#280)	1,153	0,15	90	Pass
Cell: AAA150mAh (#281)	1,152	0,15	90	Pass
Cell: AAA200mAh (#282)	1,173	0,2	90	Pass
Cell: AAA200mAh (#283)	1,172	0,2	90	Pass

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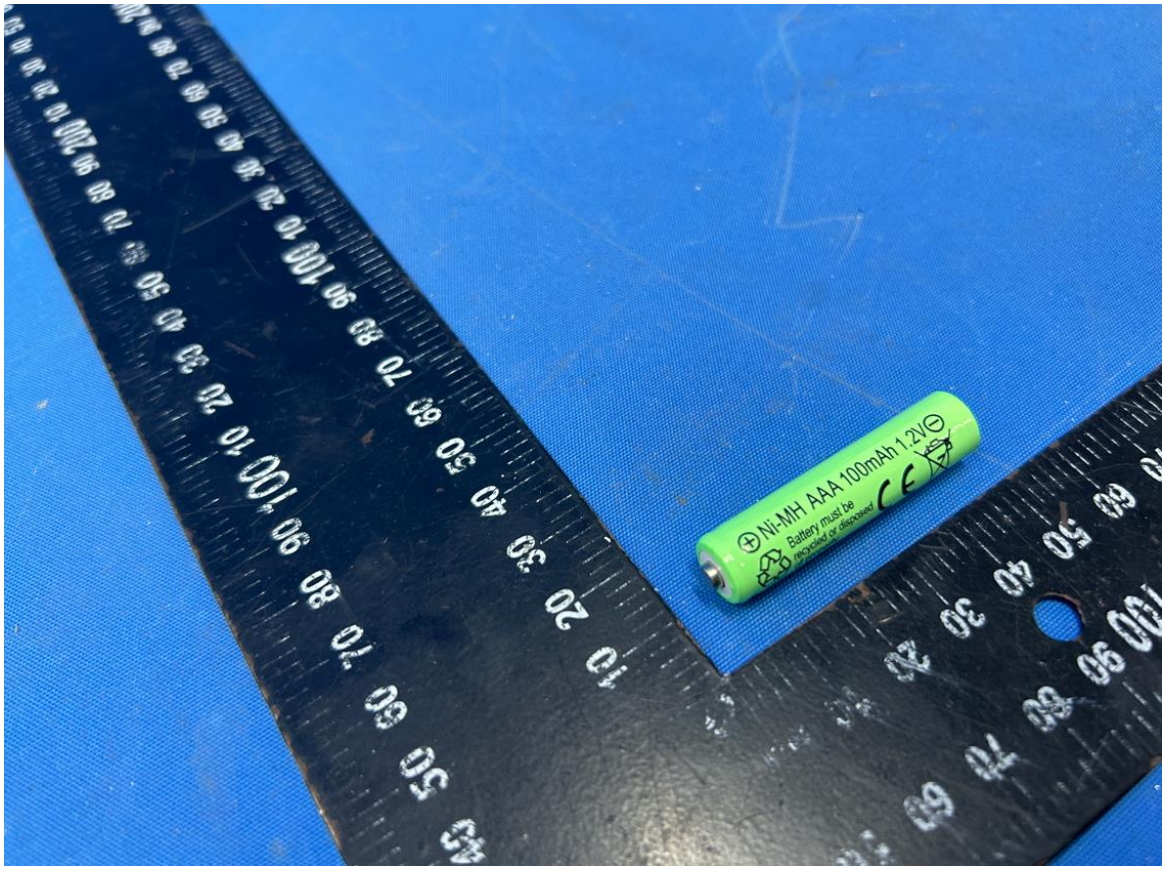
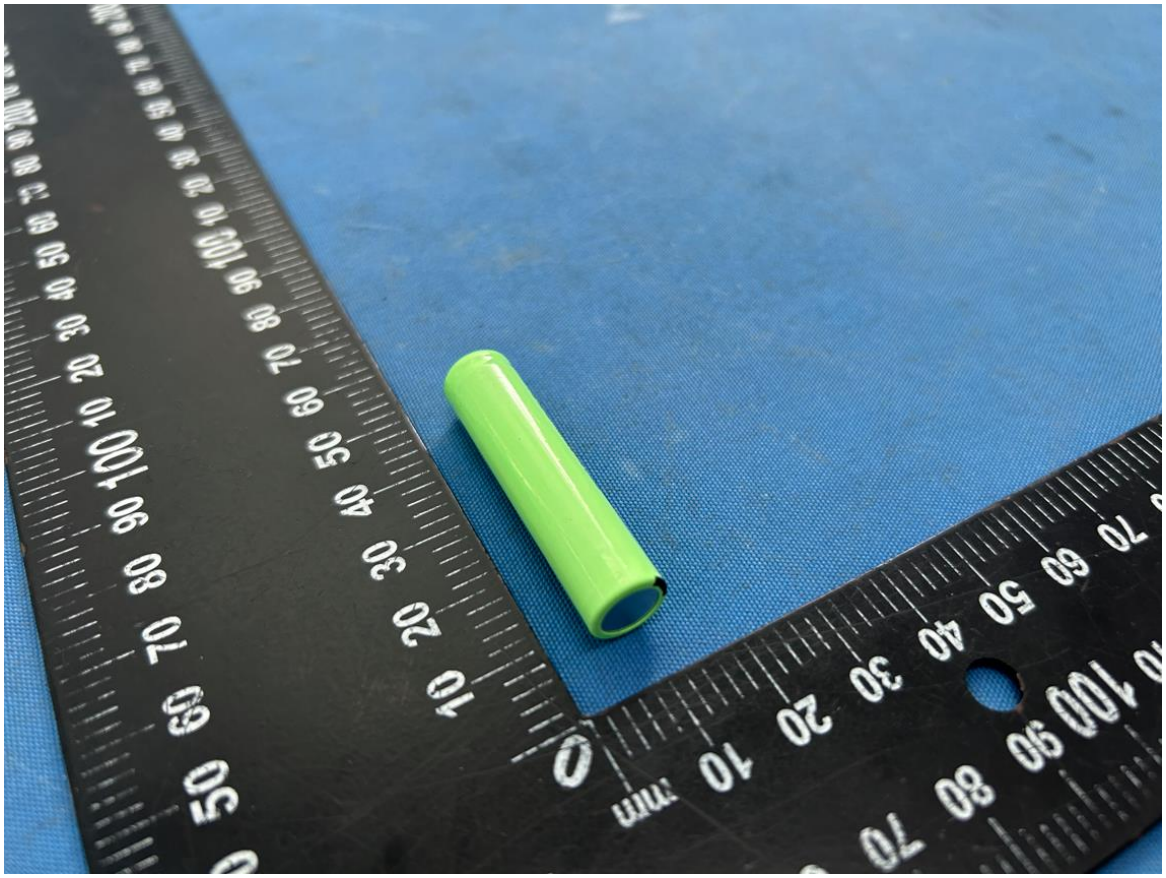
Clause	Requirement + Test		Result - Remark	Verdict
Cell: AAA200mAh (#284)	1,171	0,2	90	Pass
Cell: AAA200mAh (#285)	1,173	0,2	90	Pass
Cell: AAA200mAh (#286)	1,172	0,2	90	Pass
Cell: AAA250mAh (#287)	1,153	0,25	90	Pass
Cell: AAA250mAh (#288)	1,154	0,25	90	Pass
Cell: AAA250mAh (#289)	1,152	0,25	90	Pass
Cell: AAA250mAh (#290)	1,155	0,25	90	Pass
Cell: AAA250mAh (#291)	1,153	0,25	90	Pass
Cell: AAA300mAh (#292)	1,170	0,3	90	Pass
Cell: AAA300mAh (#293)	1,164	0,3	90	Pass
Cell: AAA300mAh (#294)	1,168	0,3	90	Pass
Cell: AAA300mAh (#295)	1,171	0,3	90	Pass
Cell: AAA300mAh (#296)	1,172	0,3	90	Pass
Cell: AAA400mAh (#297)	1,173	0,4	90	Pass
Cell: AAA400mAh (#298)	1,175	0,4	90	Pass
Cell: AAA400mAh (#299)	1,174	0,4	90	Pass
Cell: AAA400mAh (#300)	1,173	0,4	90	Pass
Cell: AAA400mAh (#301)	1,170	0,4	90	Pass
Cell: AAA500mAh (#302)	1,157	0,5	90	Pass
Cell: AAA500mAh (#303)	1,156	0,5	90	Pass
Cell: AAA500mAh (#304)	1,155	0,5	90	Pass
Cell: AAA500mAh (#305)	1,157	0,5	90	Pass
Cell: AAA500mAh (#306)	1,154	0,5	90	Pass
Cell: AAA600mAh (#307)	1,171	0,6	90	Pass
Cell: AAA600mAh (#308)	1,173	0,6	90	Pass
Cell: AAA600mAh (#309)	1,172	0,6	90	Pass
Cell: AAA600mAh (#310)	1,174	0,6	90	Pass
Cell: AAA600mAh (#311)	1,172	0,6	90	Pass
Cell: AAA800mAh (#312)	1,125	0,8	90	Pass
Cell: AAA800mAh (#313)	1,127	0,8	90	Pass
Cell: AAA800mAh (#314)	1,125	0,8	90	Pass
Cell: AAA800mAh (#315)	1,126	0,8	90	Pass
Cell: AAA800mAh (#316)	1,125	0,8	90	Pass
Supplementary information: -No fire or explosion				

---End of report---

Attachment 1 Photo documentation

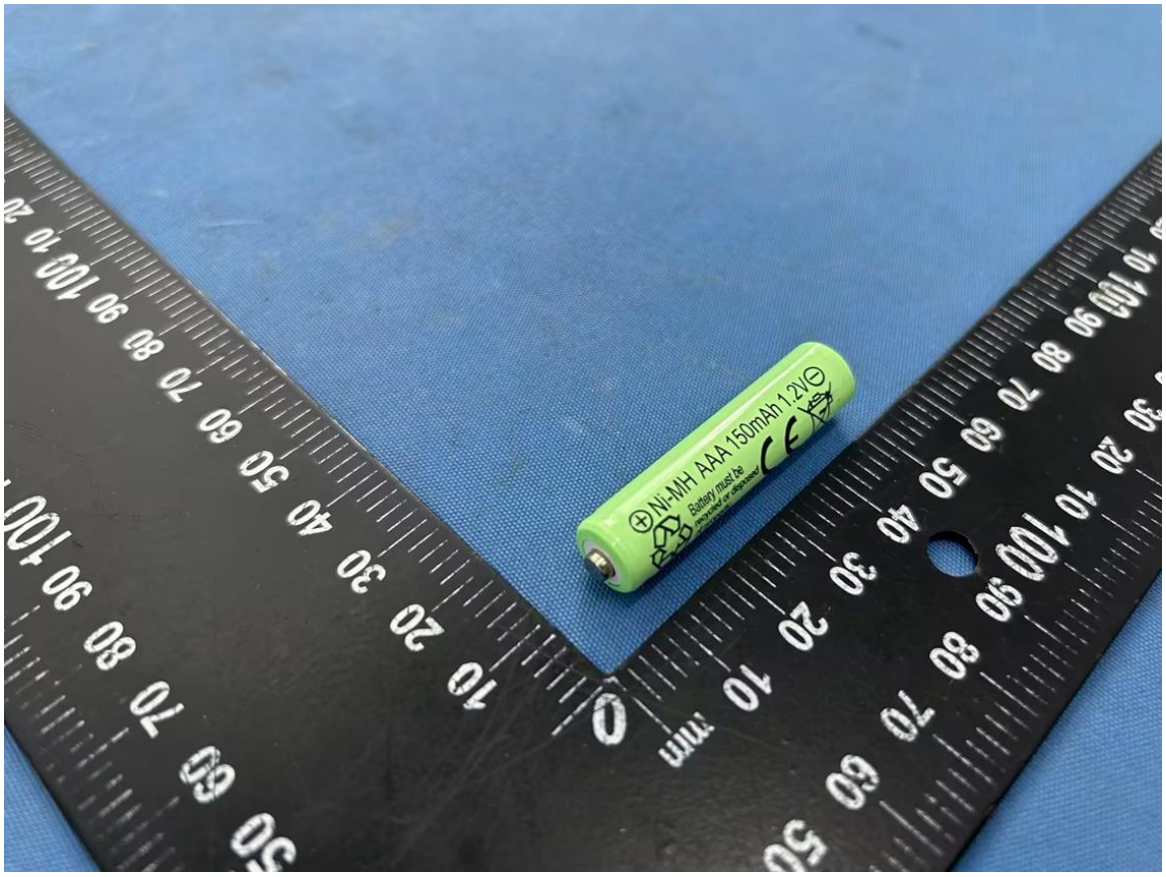
Cell (AAA100mAh)

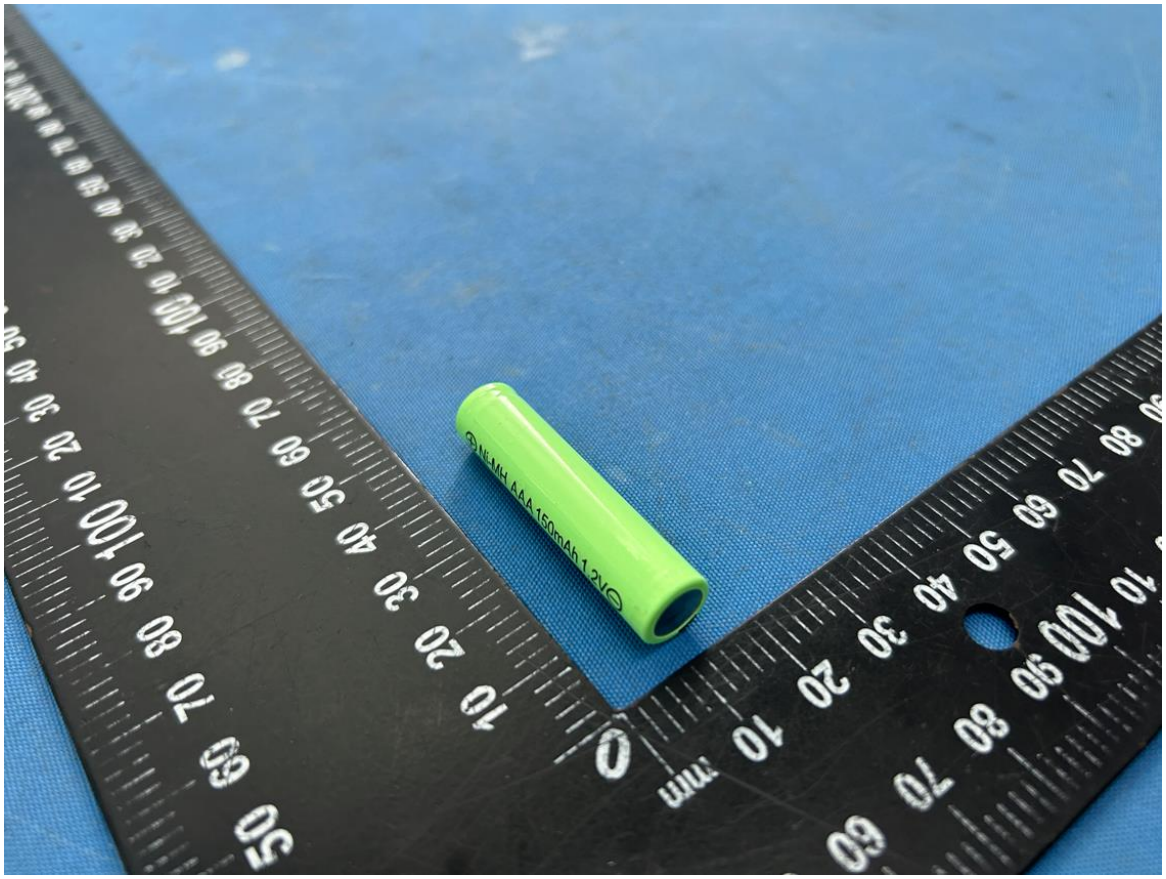




Attachment 1 Photo documentation

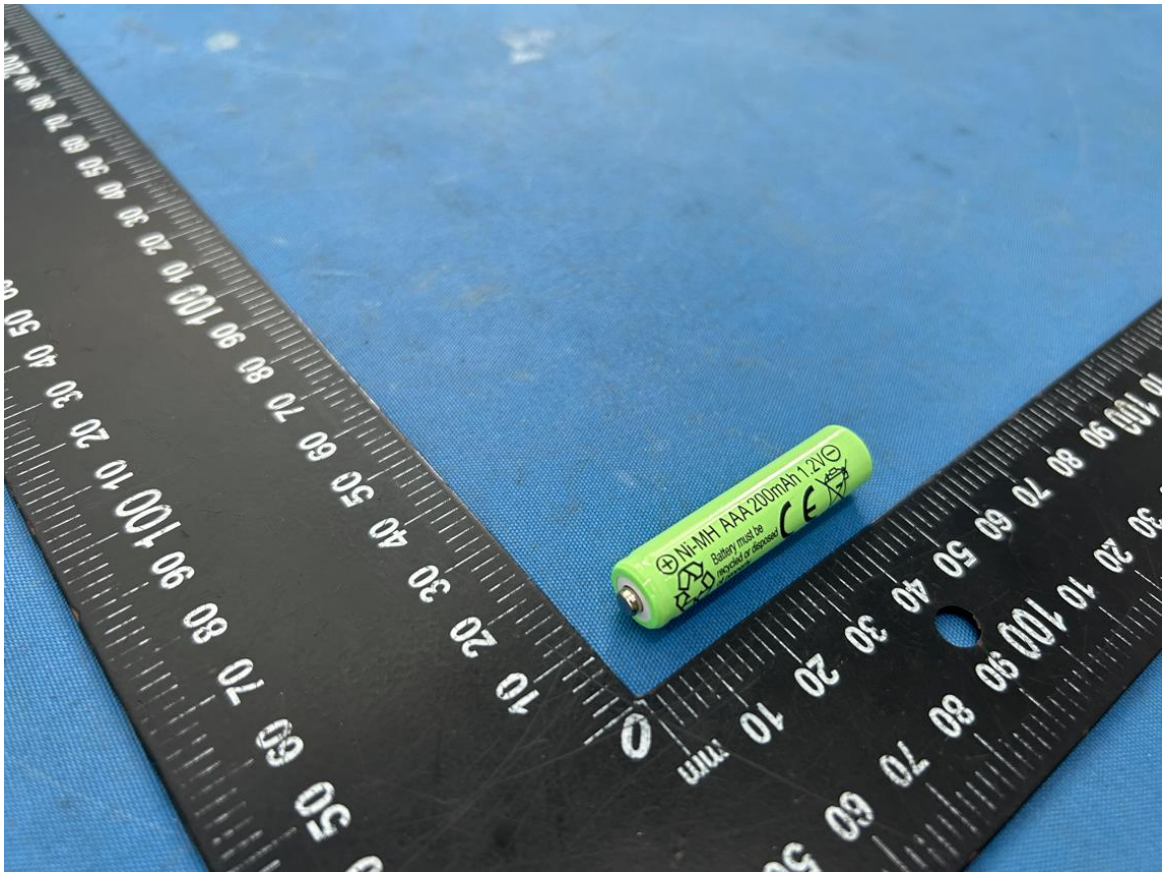
Cell (AAA150mAh)

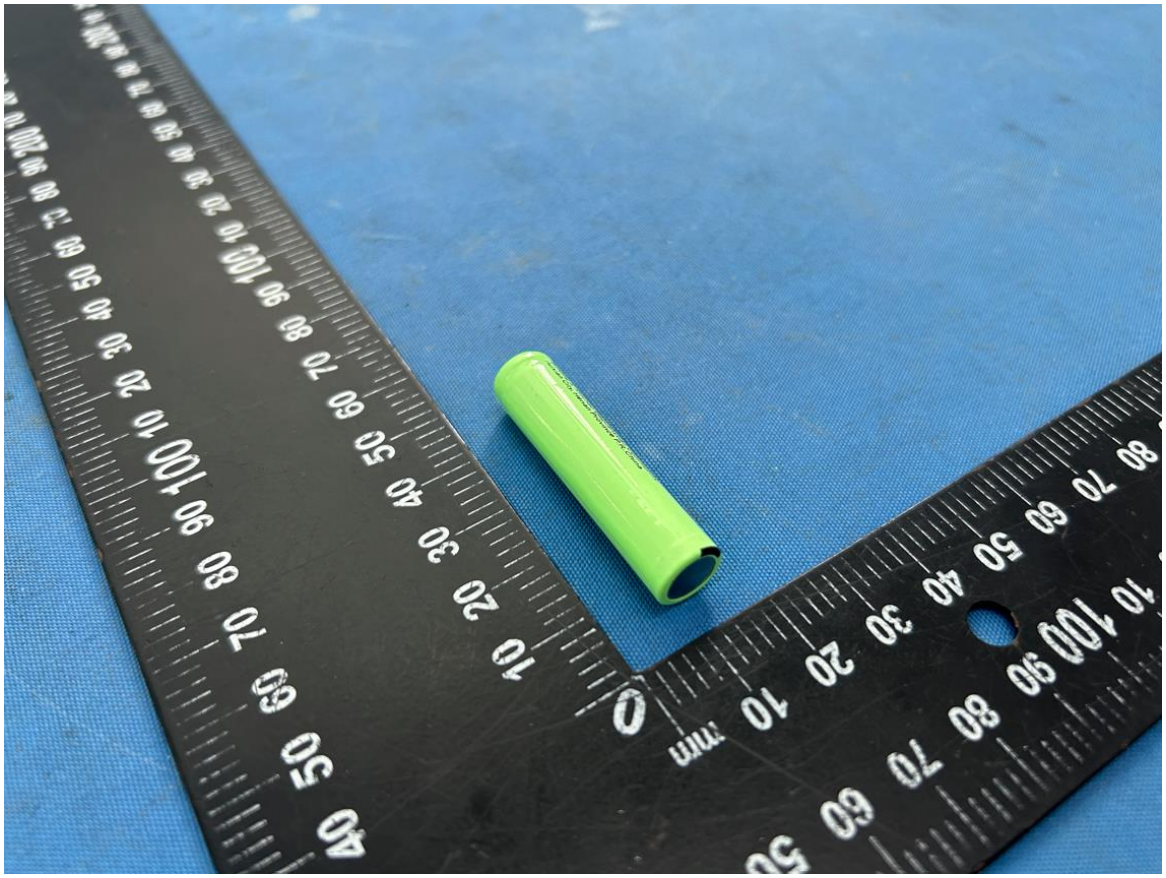




Attachment 1 Photo documentation

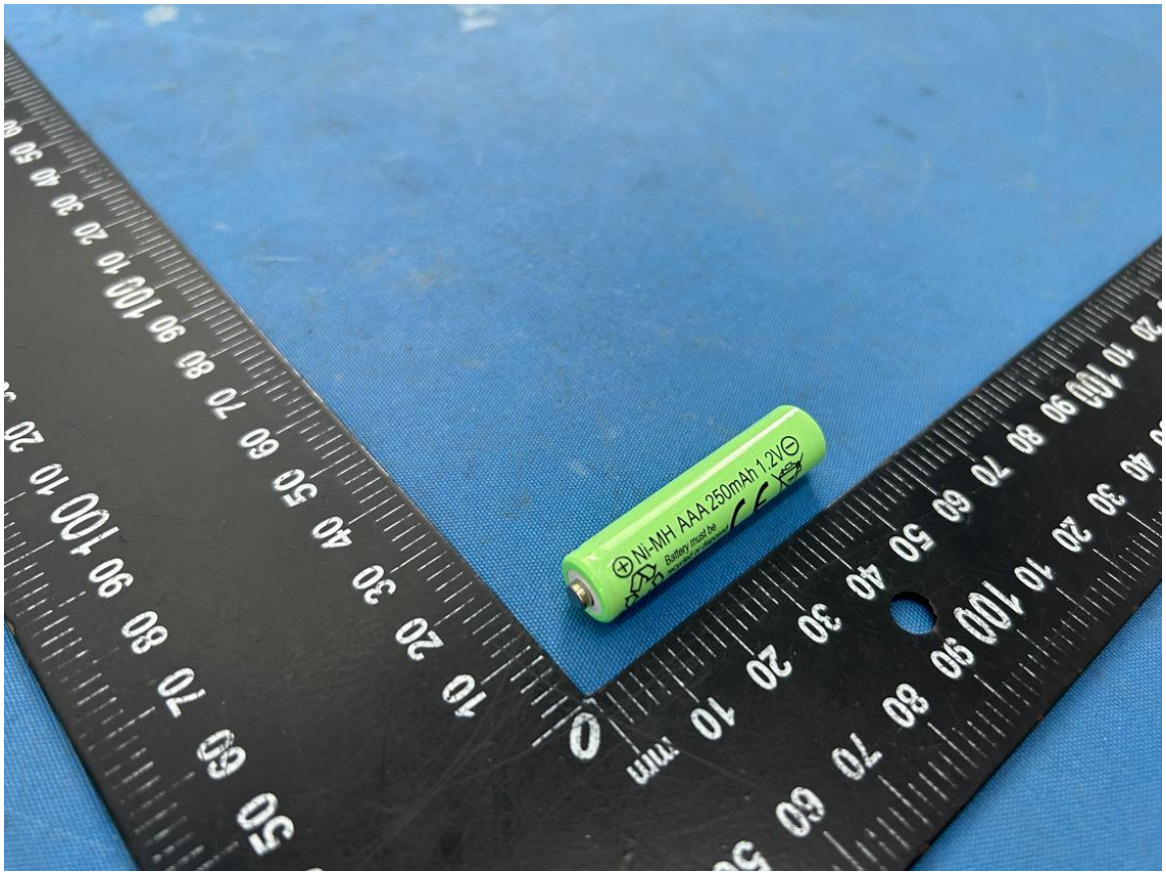
Cell (AAA200mAh)





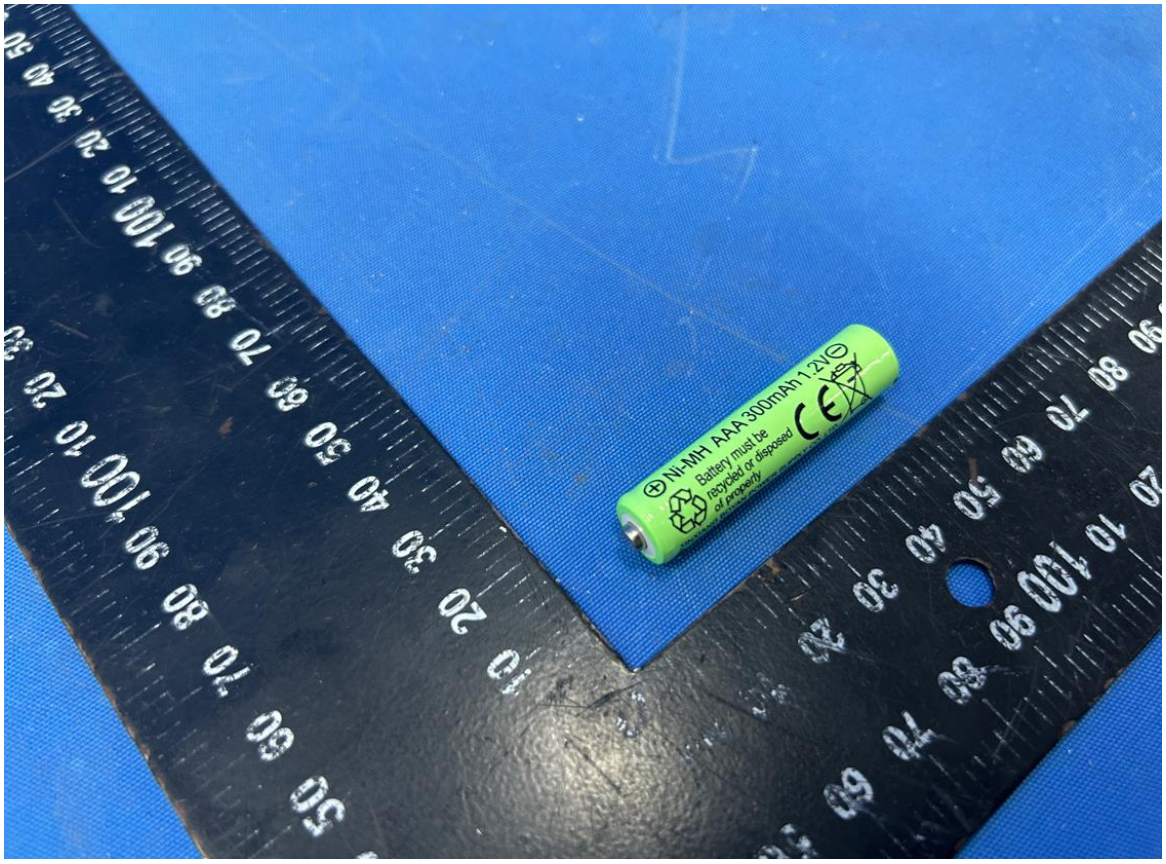
Attachment 1 Photo documentation

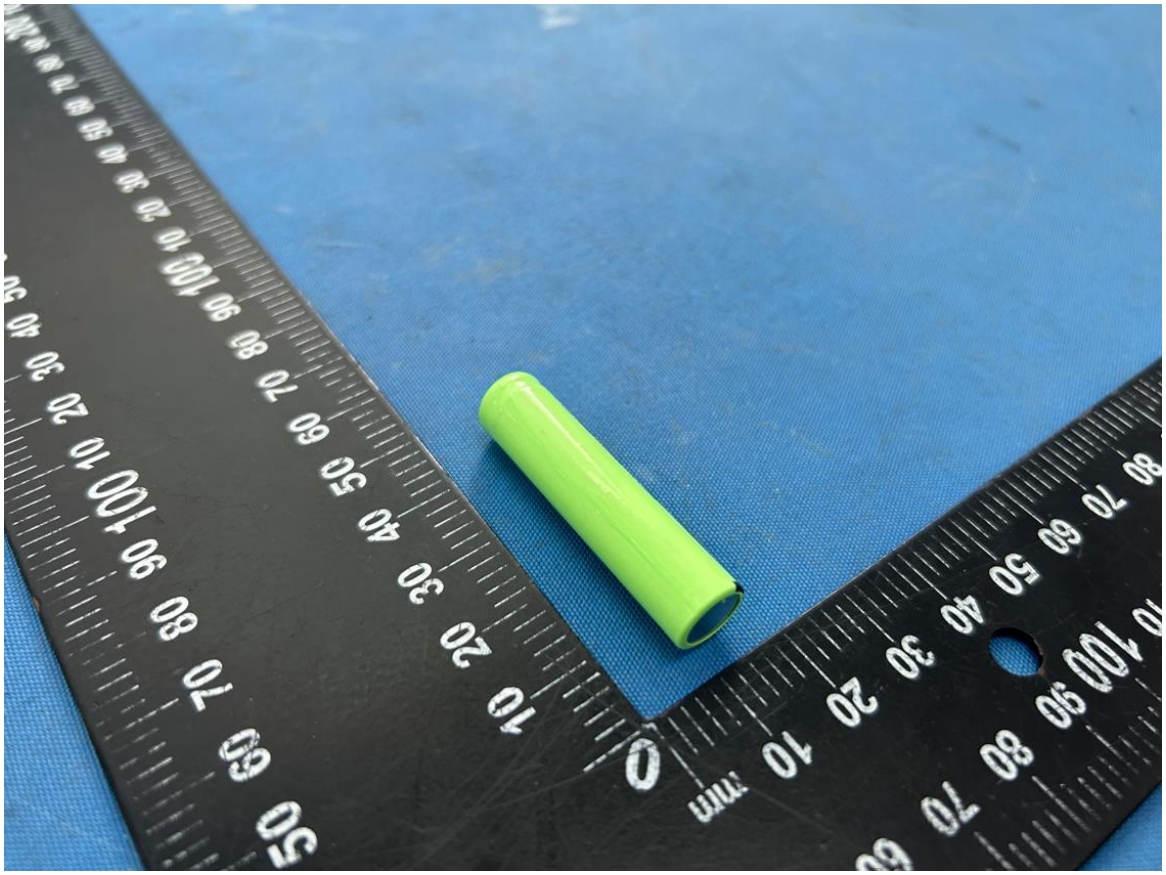
Cell (AAA250mAh)



Attachment 1 Photo documentation

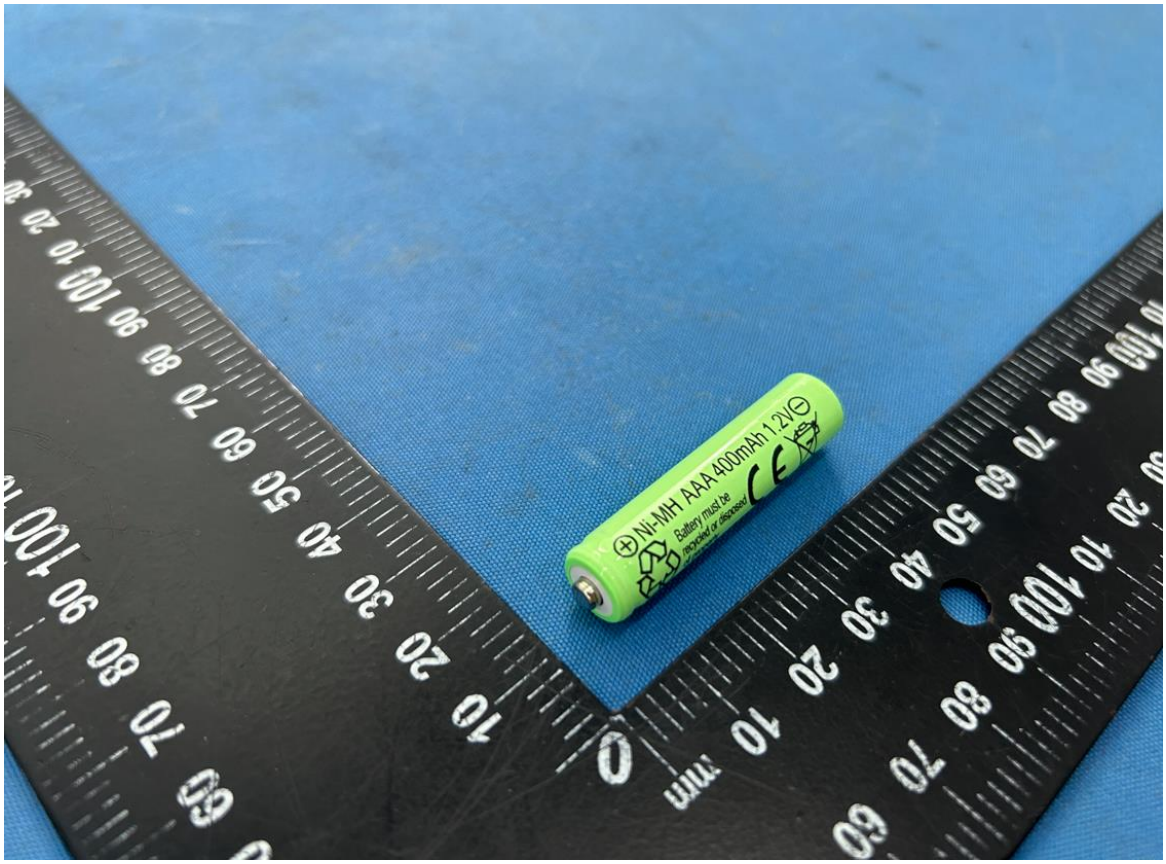
Cell (AAA300mAh)

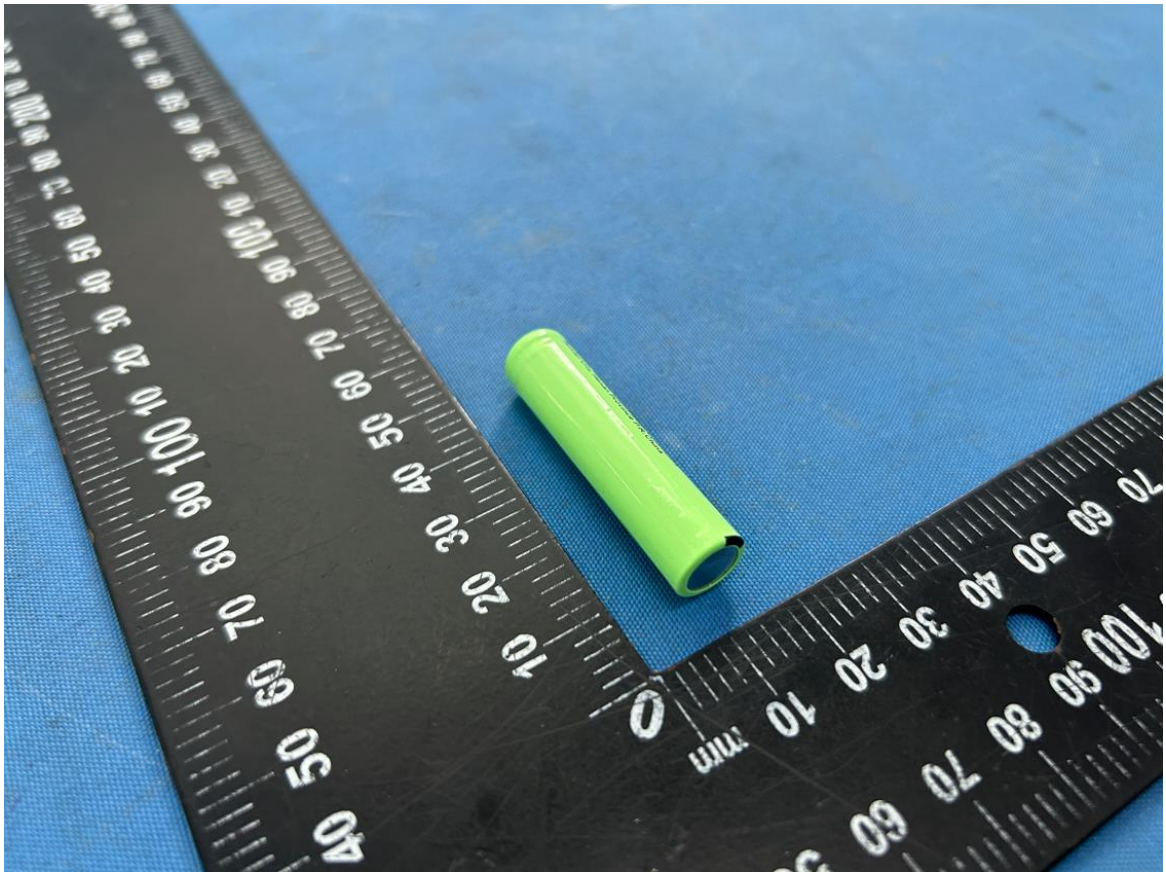




Attachment 1 Photo documentation

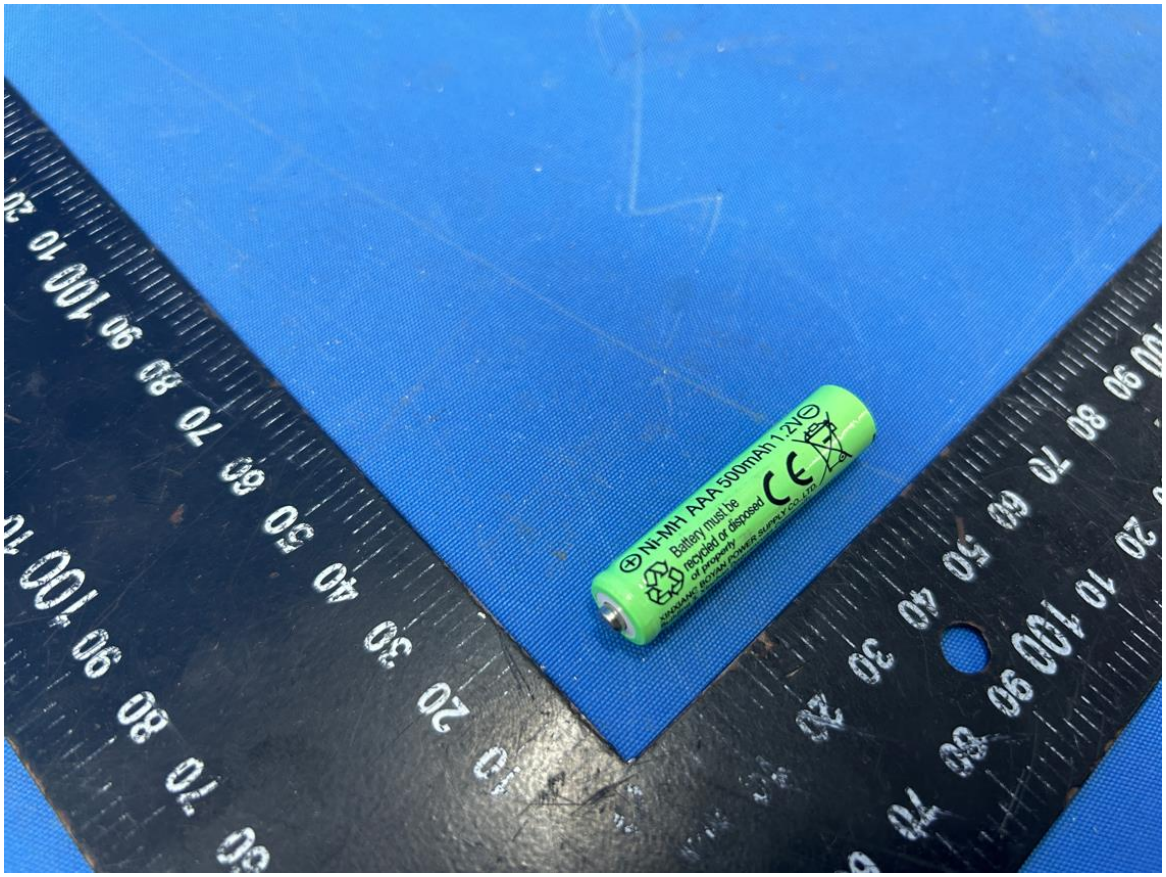
Cell (AAA400mAh)

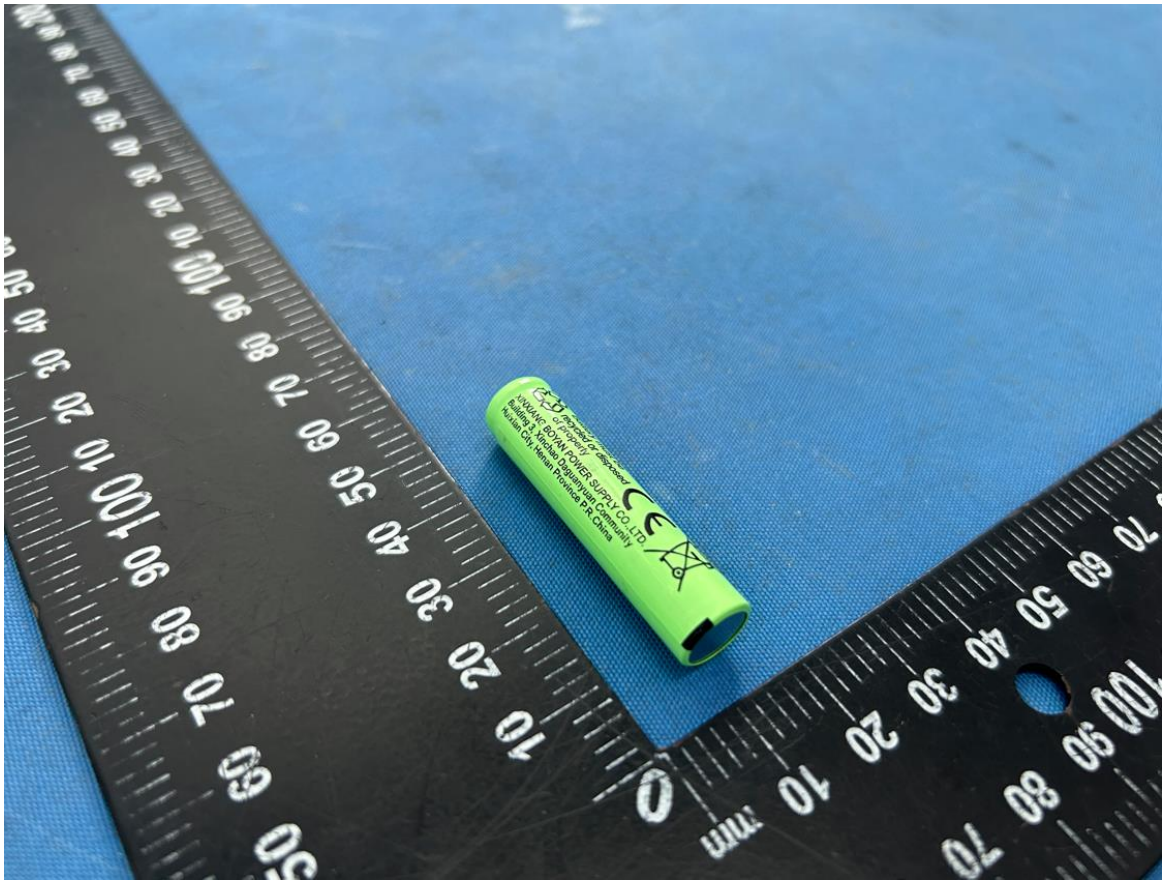




Attachment 1 Photo documentation

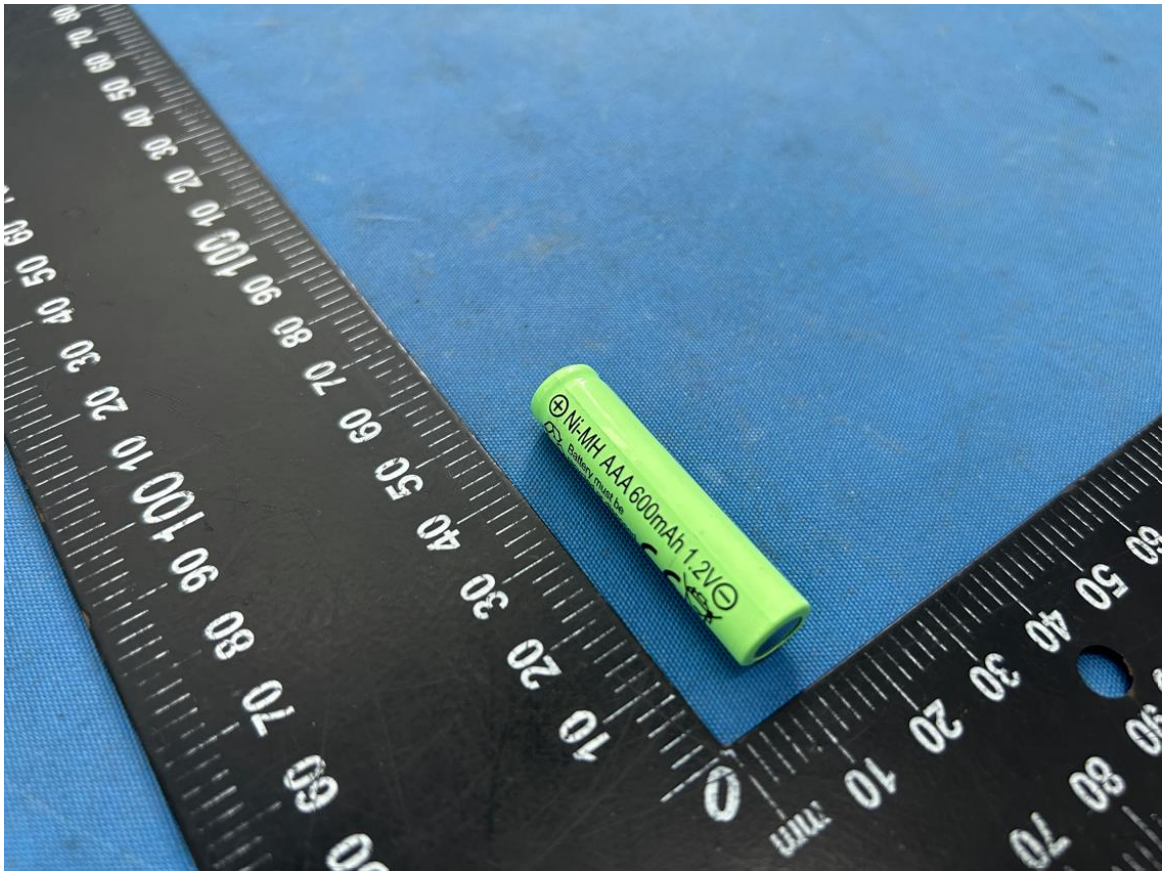
Cell (AAA500mAh)





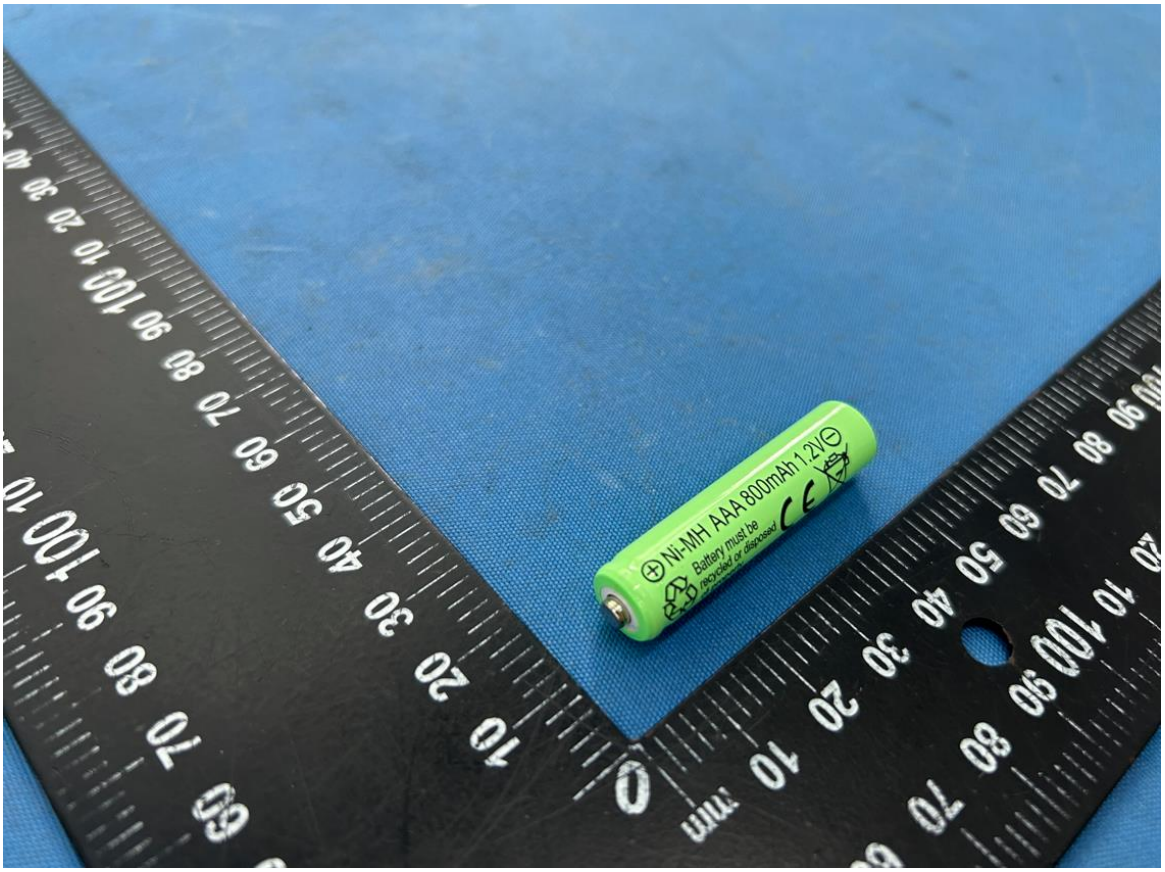
Attachment 1 Photo documentation

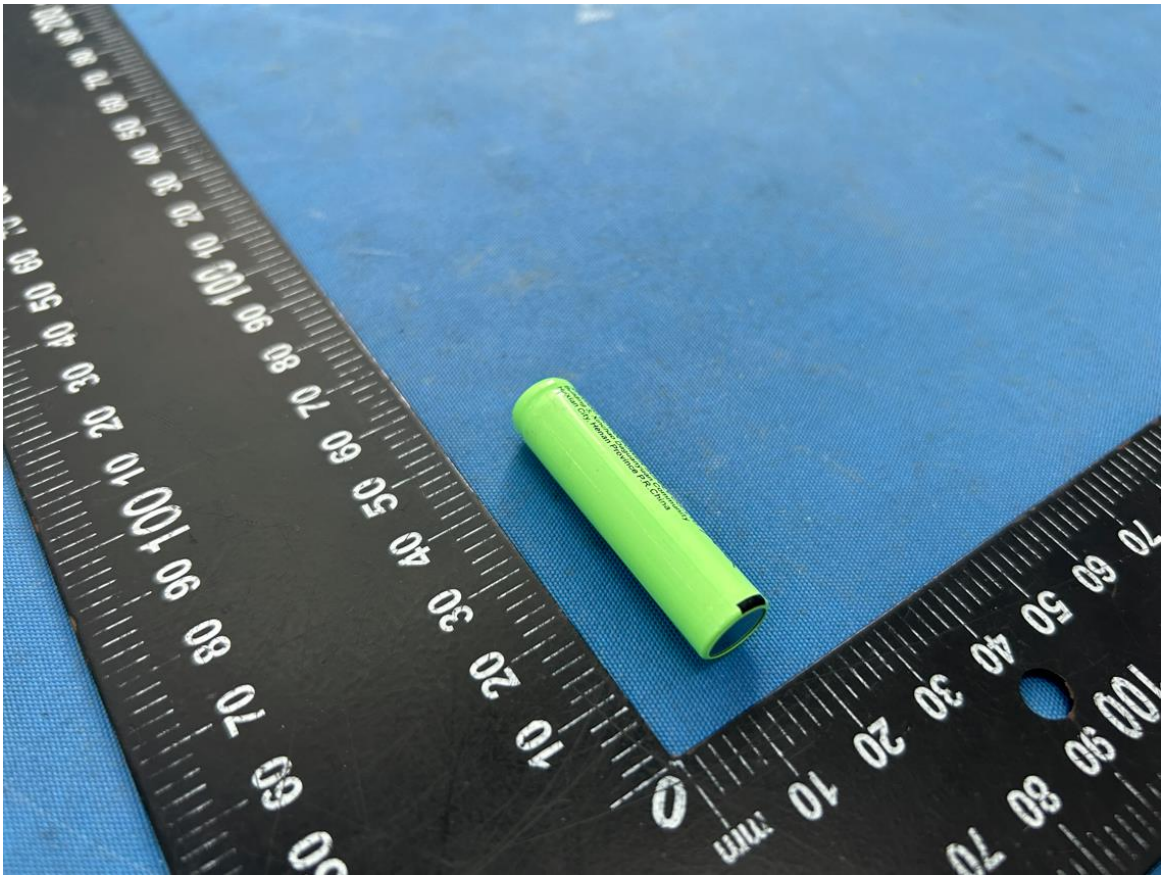
Cell (AAA600mAh)



Attachment 1 Photo documentation

Cell (AAA800mAh)





- - - End of Attachment 1 - - -

Attachment 2 Information for safety

14、Storage

- The battery should be kept in 10 ℃ to 25 ℃ (not more than 30 ℃), humidity 45% ~ 75%.When the battery is stored in an environment not higher than 30℃, 40℃ or 50℃, it should be charged every 4 months, 3 months or 1 month.
- The battery should be kept away from the heat source, and should not be placed in a place directly under the sun, so as to ensure that it is clean, cool, dry and ventilated without being affected by the climate.
- The stacking height of the battery depends on the packaging strength. It is generally stipulated that the stacking height of the paper box shall not exceed 1.5 meters and the wooden box shall not exceed 3 meters.
- The batteries shall be stored and displayed in the original packaging. After removing the packaging, the batteries shall be piled up in disorder, which is easy to cause short circuit and damage to the batteries

15、Safety precautions:

Nickel metal hydride batteries are made of pollution-free materials with unique technology.All through UL safety certification. However, as a kind of nickel battery, it is as dangerous as other types of batteries in case of mechanical damage. Therefore, the following precautions should be observed in the loading, unloading and use of nickel metal hydride battery.

● Not short circuit

● Do not place battery in a device with the (+) and (-) in the wrong way around.

● The battery cannot store in damp, high temperature, corrosion deposit environment.

● Avoid overly charge or discharge

● Do not solder directly on the surface of the battery (the high temperature will damage the battery performance). Use a battery with a guide ear or lead wire in advance

● Batteries of different specifications are not allowed to be mixed, and old and new batteries are not allowed to be mixed

● Do not assemble batteries from different manufacturers

- Keep small cells and batteries which are considered swallowable out of the reach of children.
- Swallowing may lead to burns, perforation of soft tissue, and death. Severe burns can occur within 2 h of ingestion.
- In case of ingestion of a cell or battery, seek medical assistance promptly.

— When disposing of secondary cells or batteries, keep cells or batteries of different electrochemical systems separate from each other.(电池处置信息)

- - - End of Attachment 2 - - -

Attachment 3 Packaging

- - - End of Attachment 3 - - -

Attachment 4 Product specification

Specification of Cell (Model: AAA100mAh)

Number	Item		Character
3.1	Model		AAA100
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		100
3.4	Standard Charge		10mA charge 16h
3.5	Rapid Charge		20mA charge 7.5h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA) （20±5℃， Termination voltage 1.0v）		200mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		5.6（including casing）
3.12	Internal resistance（mΩ）		≤50
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Specification of Cell (Model: AAA150mAh)

Number	Item		Character
3.1	Model		AAA150
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		150
3.4	Standard Charge		15mA charge 16h
3.5	Rapid Charge		30mA charge 7.5h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA) （20±5℃， Termination voltage 1.0v）		300mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		6.1（including casing）
3.12	Internal resistance（mΩ）		≤50
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Specification of Cell (Model: AAA200mAh)

Number	Item		Character
3.1	Model		AAA200
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		200
3.4	Standard Charge		20mA charge 16h
3.5	Rapid Charge		40mA charge 7.5h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA) （20±5℃， Termination voltage 1.0v）		400mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		6.6（including casing）
3.12	Internal resistance（mΩ）		≤50
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Specification of Cell (Model: AAA250mAh)

Number	Item		Character
3.1	Model		AAA250
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		250
3.4	Standard Charge		25mA charge 16h
3.5	Rapid Charge		50mA charge 7.5h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA) （20±5℃， Termination voltage 1.0v）		500mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		7.2（including casing）
3.12	Internal resistance（mΩ）		≤50
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Specification of Cell (Model: AAA300mAh)

Number	Item		Character
3.1	Model		AAA300
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		300
3.4	Standard Charge		30mA charge 16h
3.5	Rapid Charge		60mA charge 7.5h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA) （20±5℃， Termination voltage 1.0v）		600mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		7.5（including casing）
3.12	Internal resistance（mΩ）		≤40
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Specification of Cell (Model: AAA400mAh)

Number	Item		Character
3.1	Model		AAA400
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		400
3.4	Standard Charge		40mA charge 16h
3.5	Rapid Charge		80mA charge 7.5h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA) （20±5℃， Termination voltage 1.0v）		400mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		9.1（including casing）
3.12	Internal resistance（mΩ）		≤35
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Specification of Cell (Model: AAA500mAh)

Number	Item		Character
3.1	Model		AAA500
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		500
3.4	Standard Charge		50mA charge 16h
3.5	Rapid Charge		100mA charge 6h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA)（20±5℃，Termination voltage 1.0v）		1000mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		9.9（including casing）
3.12	Internal resistance（mΩ）		≤35
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Specification of Cell (Model: AAA600mAh)

Number	Item		Character
3.1	Model		AAA600
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		600
3.4	Standard Charge		60mA charge 16h
3.5	Rapid Charge		120mA charge 6h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA) （20±5℃， Termination voltage 1.0v）		1200mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.1±0.1*44.1±0.5
3.11	Approx weight (g)		10.8（including casing）
3.12	Internal resistance（mΩ）		≤35
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

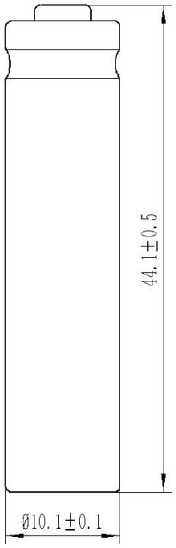
Attachment 4 Product specification

Specification of Cell (Model: AAA800mAh)

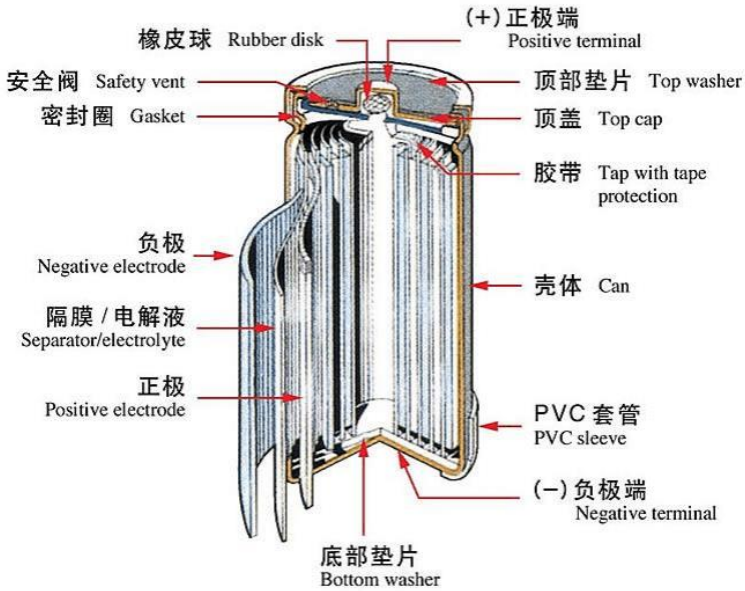
Number	Item		Character
3.1	Model		AAA800
3.2	Nominal Voltage（V）		1.2
3.3	Nominal Capacity (mAh)		800
3.4	Standard Charge		80mA charge 16h
3.5	Rapid Charge		160mA charge 6h
3.6	Trickle Charge current (mA)		0.03c-0.05c
3.7	Maximum continuous discharge current (mA)（20±5℃， Termination voltage 1.0v）		800mA
3.8	Discharge cut-off Voltage (V)		1.0
3.9	Charge Retention (20°C)		≥65%
3.10	Dimensions（mm）	D*H (mm)	10.5－0.5*44.5－0.7
3.11	Approx weight (g)		12.0（including casing）
3.12	Internal resistance（mΩ）		≤30
3.13	Operating temperature range (°C)	Standard Charge	0~45
		Rapid Charge	10~40
		Discharge	-20~65
		Storage	-20~35(RH≤85%)

Attachment 4 Product specification

Structure chart



Construction of cell



- - - End of Attachment 4- - -