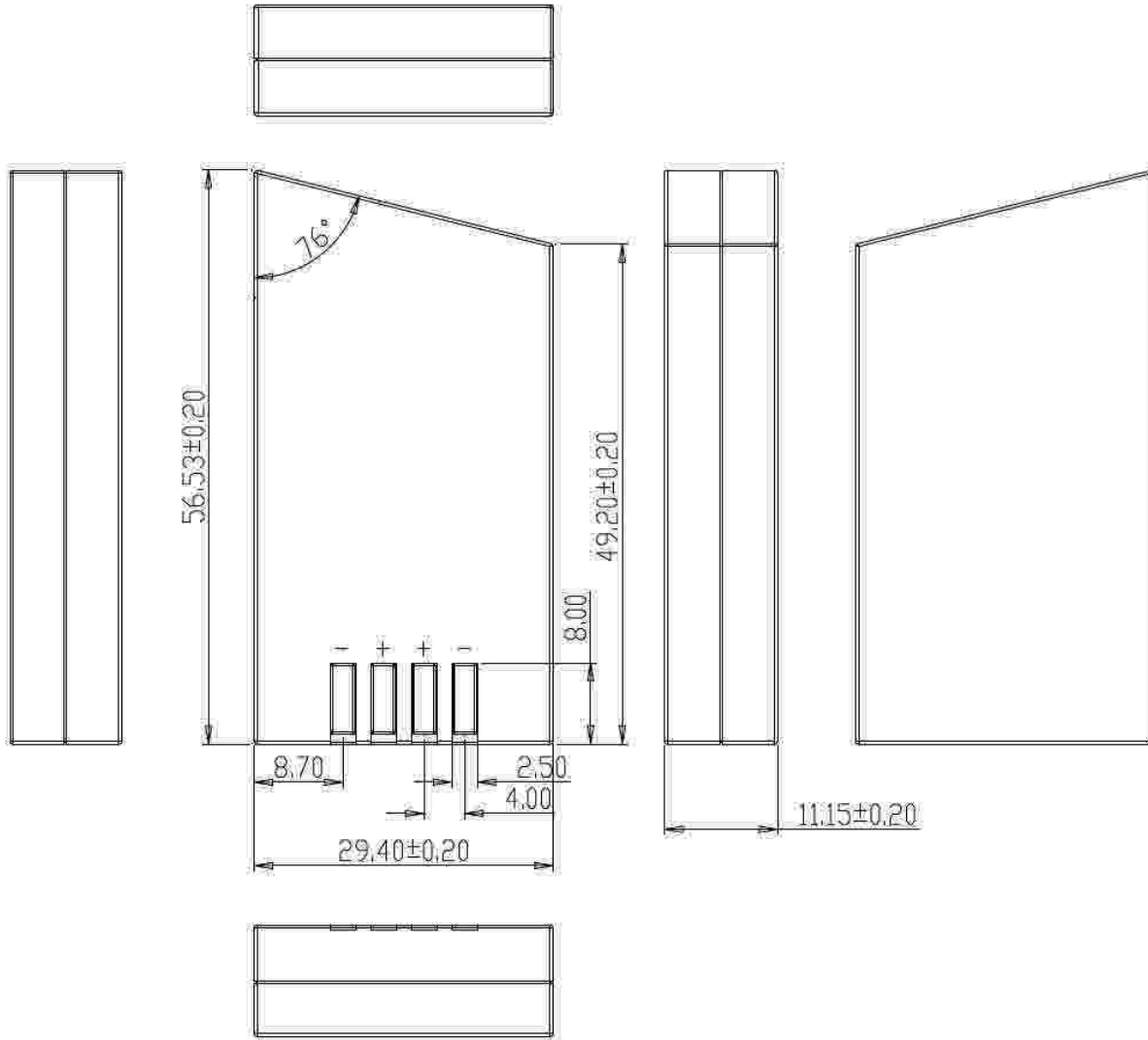


Data Sheet

Lithium-polymer rechargeable battery for Eppendorf Easypet®3

International Order No.	4430 605.009
Order No. North America	4430605009
Type Designation	QWLIPB-102745-11
System	Li-Ion
Nominal Voltage [V]	3.7 (average)
Nominal Capacity C [mAh]	1100
Dimensions [mm]:	
Width (W)	29.40
Height (H)	56.53
Depth (D)	11.15
Weight, approx. [g]	22.0
Charging Method	Constant Current + Constant Voltage
Discharge Cut-Off voltage [V]	2.5
Overcharge protection voltage [V]	4.2
Max. Continuous Charge Current	1C
Max. Continuous Discharge Current	1C
Operating Temperature [°C]	Charge: 0 to 55 Discharge: -20 to 55
Storage Temperature [°C]	1 Year at 0 to 25 3 Month at -20 to 40 1 Month at -20 to 55
Storage Humidity [%]	≤ 75
Impedance Initial (at 25°C) [mΩ]	≤ 150

Dimensions of battery pack:



Use Attentions:

- To ensure proper use of the battery please read the manual carefully before using it

Warnings:

- Do not expose to or dispose of the battery in fire
- Do not put the battery in a charger or equipment with wrong terminals connected
- Avoid shorting the battery
- Avoid excessive physical shock or vibration
- Do not disassemble or deform the battery
- Do not immerse in water
- Do not use the battery mixed with other different types or models of batteries
- Keep out of reach of children
- Do not solder directly to the cells/batteries
- Swallowing a battery can be harmful. Contents of an open battery can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

Charge:

- Battery must be charged in an appropriate charger only
- Never use a modified or damaged charger
- Charge current: Must not surpass the maximum charge current specified in this sheet
- Charge voltage: Must not surpass the maximum voltage current specified in this sheet
- Charge temperature: Make sure that the charging temperature does not surpass the limits of operating temperatures specified in this sheet
- Use constant current and constant voltage to charge. Please connect the positive and negative terminals in the right way. Otherwise the battery may be damaged.

Discharge:

- The discharge current must not surpass the maximum discharge current specified in this sheet
- Large discharge current can cause heat and lower capacity
- Discharge temperature: Make sure that the discharging temperature does not surpass the limits of operating temperatures specified in this sheet

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- Over-discharge: A short-time over-discharge won't damage the battery. But the battery will be damaged for being long time over-discharged.

Storage

- The Li-ion battery pack should be stored in a cool, dry and well-ventilated area, and should stay far away from fire and high temperature
- The best storage temp. is 0 to 25 °C. The best humidity is 60±25%
- The battery should be charged to 40%~60% of its nominal capacity (3.85V)
- In order to avoid over-discharge, we suggest to charge and discharge the batteries every three months. Then charge to 40% ~ 60% of its nominal capacity (3.85V)
- During long-term storage, the battery may achieve over-discharge condition through self-discharge. To prevent over-discharge during storage, the battery should maintain certain capacity

Transport Information:

- **UN Number:** UN3481
- **Mode of transport:** Sea, air, road transport
- The consignment complies with the current edition-53rd 2012 of the IATA regulation
- 1. Section II of packing instruction 966(for Lithium-ion cells/batteries packed with equipment, shipped as "Not Restricted" Cargo).
- 2. Meets all requirements under UN manual of tests and criteria part III, subsection 38.3.
- 3. With content of less than 20Wh per cell or 100Wh per battery. The consignment can be shipped as "Not Restricted" in accordance with the current edition of IATA-DGR-2012, so far as:
 - a) the consignment does not contain any recalled and/or defective batteries.
 - b) the consignment have been packed in comply with Section II of PI966.
 - c) the consignment is handled with care: flammable hazard could pass out if the packaging is damaged.
 - d) if the packaging is damaged, batteries must be protected to prevent short circuit

No.	Item	Result	Remark
1	Altitude simulation	Pass	Test 1..5 must ne conducted in sequence on the same cell or battery
2	Thermal test	Pass	
3	Vibration	Pass	
4	Shock	Pass	
5	External short circuit	Pass	

6	Impact	Pass	
7	Overcharge	Pass	Only battery do need this test

- The product is not classified as dangerous under the current edition of the ICAO & IATA dangerous goods regulations and according PI966 all applicable Carriers. The product is safe for air transportation and not regulated by ICAL & IATA DGR.

Transportation

- Do not immerse the battery in water and protect it against splashing liquids
- Do not stack more than 7 layers
- The highest temperature in transportation should be less or equal than 55°C

Composition/ Information on Ingredients

- Components of Li-ion Polymer Battery:

Component	Percentage by weight
Co	59.2-60.6
Li	6.8-7.4
Ni	≤ 0.03
Fe	≤ 0.015
Cu	≤ 0.005
Ca	≤ 0.015
Mg	≤ 0.01
PH	10.0-11.5
H2O	≤ 0.2

Hazards Identification:

Do not short circuit, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above the declared operating temperature range of the product.

- **Health Hazards:** No hazard exists under normal use. Can cause thermal and chemical burns upon contact with the skin
- **Environment Hazards:** Like any sealed container, battery cells may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials

First Aid Measures:

- **Skin and Eyes:** In the event that battery ruptures, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water
- **Inhalation:** If vapors or fumes from vented or leaking battery are irritating to respiratory tract, move to fresh air. Seek medical attention immediately
- **Ingestion:** Ingestion of a battery can be harmful. Call The National Capital Poison Control Center or your local Poison Control Center, day or night - for advice and follow-up

Fire-Fighting Measures:

- **Combustible:** Not applicable
- **Special fire-fighting Procedures:** As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition product
- **Hazardous thermal (de) composition products:** Like any sealed container, battery cells may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials.
- **Emergency treatment:** Use water, foam or dry powder, as appropriate

Physical and Chemical Properties:

Appearance	Solid	Color	Silvery
Smell:	No data	PH	No data
Solubility:	No data	Melting Point	No data
Flash point:	No data	Explosive	No data
Specific heat:	No data	Flammability	No data

Toxicological Information:

Acute Toxicity:	
Inhalation	Lung irritant
Ingestion	Poisoning if swallowed
Eye Contact	Eye irritant Skin
Contact	Skin irritant
Chronic Toxicity	No data available
Sensitization	No data available
Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Other	No data available

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