

Rev: 1

Rev date: 20/10/25

Safety data sheet

acc. to 1907/2006/EC, Art. 31

Doc Nr: P2.04/028(I). D

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Product Form: Article
Product Identifier: Qore InTube 650
Product Code: 03546

1.2 Relevant identified uses of substance or mixture and uses advised against

Relevant identified uses: Rechargeable Li-ion Battery pack for professional use only
Uses advised against: No further information available

1.3 Details of the supplier of the safety data sheet

Supplier

EMBS Sp. z o.o.
ul. Alberta Einsteina 36
PL-44-109 Gliwice, Poland
+48 (0) 32 330 2650
contact@embatterysystems.com

Customer / Distributor

Yamaha Motor eBike Systems GmbH
Sickingenstrasse 29-38
10553 Berlin, Germany

1.4 Emergency phone number

Tel: +1 (205) 419 – 5174

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP)

Not classified: this product is a manufactured article (battery) as defined under Article 3(3) of Regulation (EC) No. 1907/2006 (REACH). It is therefore not subject to classification or labelling under Regulation (EC) No. 1272/2008 (CLP).

2.1.2. Additional information

No further information is available.

2.2. Label elements

This product is a manufactured article (battery) as defined under Article 3(3) of Regulation (EC) No. 1907/2006 (REACH). It is therefore not subject to classification or labelling under Regulation (EC) No. 1272/2008 (CLP). Labelling is done according to Regulation (EU) 2023/1542 (Battery Regulation).

2.3. Other hazards

In case of electrolyte leakage: Depending on the concentration, the aqueous electrolyte solution may cause irritation or burns to eyes, skin, and mucous membranes. In the event of cell damage, the battery may release hazardous substances and a flammable gas mixture, which could pose fire or health hazards. These hazards are not released during under normal conditions of use and when the battery is handled according to the manufacturer's instructions and intended purpose or during reasonably foreseeable use. Exposure may occur only if the cell ruptures or leaks.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

This product is an article according to REACH. This product contains multiple cells. The listed substances are contained within hermetically sealed cells and contain the listed hazardous components and, where applicable, other non-hazardous ingredients. Listed below substances are not available under normal use. Exposure may occur only in case of cell rupture or leakage. Hazard classifications (pictograms and H-phrases) therefore do not apply. Other non-hazardous components include cables, plastic connectors, rubber parts, metal parts and other inert materials.

Name	CAS No.	% [weight]
Aluminum Foil	7429-90-5	3-10
Cobalt lithium manganese nickel oxide	346417-97-8	<45
Electrolyte (EMC/PC/EC/LiPF ₆)	623-53-0/ 108-32-7/ 96-49-1/ 21324-40-3	<14
Polyvinylidene Fluoride (PVDF)	24937-79-9	<1
Copper Foil	7440-50-8	3-5
Carbon (cathode)	7440-44-0	<25

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Information:	In normal use, the products do not represent a health hazard. Avoid contact with internal components or materials contained therein.
After inhalation:	Leave area immediately. Provide fresh air. If breathing is difficult give oxygen. Seek medical assistance.
After skin contact:	Remove solid particles immediately. Flush affected areas with plenty of water (at least for 20 min). Remove contaminated clothes immediately. Seek medical attention.
After eye contact:	Flush the eye gently with plenty of water (at least for 20 min). Shield unaffected eye. Seek medical assistance immediately.
After ingestion:	Rinse mouth. Do NOT induce vomiting. Seek emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Medical aid will be required in case of symptoms obviously caused by respiration or swallowing of combustion gases or contact with skin or eyes.

4.3. Indication of any immediate medical attention and special treatment needed

No further relevant information is available

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:	ABC dry chemical, A,D and F500 fire extinguishers, large amount of cold water (min. 10 times pack weight) or sand
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Unsuitable extinguishing media: Carbon Dioxide extinguisher agents

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Combustion products include, but are not limited to hydrogen fluoride, fluorohydrocarbons, metal oxides, carbon monoxide and carbon dioxide

5.3. Advice for firefighters

Do not enter fire area without proper protective equipment, including respiratory protection. If possible, remove cell(s) from firefighting area. If heated above 125°C battery may explode / vent. Use water spray or fog for cooling exposed batteries. Keep caution when fighting any chemical fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment: Wear protective equipment. Keep unprotected people away.**Emergency procedures:** Notify safety personnel of large spills. Irritating vapors and flammable may be released from leaking or ruptured batteries. Ensure adequate ventilation. Eliminate all ignition sources. Evacuate the area and allow the vapors to dissipate. Clean-up personnel should wear appropriate protective clothing to avoid eye and skin contact and inhalation of vapors or fumes. Increase ventilation. Carefully collect batteries and place them in an appropriate container for disposal. Remove spilled liquid with absorbent and contain for disposal.

6.1.2. For emergency responders

Wear proper personal protective equipment and apparatus and avoid skin contact and inhalation. If possible, move container to safe area from the leak area. Ventilate area.

6.2. Environmental precautions

Prevent environmental release. Notify authorities if liquid contaminates public waters. Avoid spill dispersion and contact with drains, sewers, or waterways. For large spills, contact emergency services immediately.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment:

Clear spills immediately. Use soil, dsand or other non-combustible materials to absorb. Control personal contact by using protective equipment.

6.3.2. For cleaning up:

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Appropriate container for disposal of spilled material collected.

6.4. Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not open or dismantle the battery. Repair or service operations shall only be carried out by qualified, trained personnel from the supplier or distributor. Improper handling may result in short circuit, leakage, or thermal

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runaway. Avoid short circuits. Do not connect batteries of different types. Ensure battery terminals remain dry before installation. Do not short circuit the electrical connectors of the product. Do not drop, shock, puncture, crush or incinerate the product. Avoid direct sunlight, heat and ignition sources. Do not expose battery to mechanical shock, as housing may break and contents may be released. Install batteries in accordance with equipment instructions. Read the manual before use. When placing batteries in production lines, ensure fire-fighting equipment is nearby.

7.2. Conditions for safe storage, including any incompatibilities

Maintain the product in its original packaging. Store in well ventilated, dry place in about room temperature (15-20°C) and at 30% charge for optimal life. There are no user-serviceable parts within the product. Do not open the product. Only use the battery with the charger, and applications for which it was designed. Do not connect the product to other chargers (charging parameters) then specified in user guide. Do not modify the product. Storage incompatibility: Do not store with oxidizing agents, flammable liquids, or strong acids/bases.

7.3. Specific end use(s)

No additional information is available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information is available.

8.1.2. Recommended monitoring procedures

No additional information is available.

8.1.3. Air contaminants formed

No additional information is available.

8.1.4. DNEL and PNEC

No additional information is available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection:

Wear primary eye protection such as splash resistant safety goggles. Provide an emergency eye wash station and quick drench shower in the immediate work area.

8.2.2.2. Skin protection:

Hand protection:

In case of leakage wear appropriate glove made out of rubber, neoprene, vinyl coated, PVC

Other skin protection:

Wear appropriate clothing

8.2.2.3. Respiratory protection:

Not necessary if room is well-ventilated. Respiratory protection required in case of formation of smoke. Filter P3.

8.2.2.4. Thermal hazards:

No additional information is available.

8.3. Environmental exposure controls

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In case of leakage: Do not breathe gas/fumes, avoid contact with skin, eyes and clothing, eliminate ignition sources.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	Various
Odour:	odourless
Melting point/freezing point:	Not determined
Boiling point:	Not determined °C
Flammability:	Nonflammable
Lower and upper explosion limit:	Not applicable
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	Not determined
pH:	Not determined
Kinematic viscosity:	Not applicable
Solubility:	Insoluble
Solubility in Water:	Insoluble
Density and/or relative density:	Not determined
Partition coefficient n-octanol/water (log value):	Not determined
Vapour pressure:	Not applicable
Relative vapour density:	Not applicable
Particle characteristics	
The particle size:	Not determined
Particle size distribution:	Not determined
Particle shape and aspect ratio:	Not determined
Particle aggregation and agglomeration state:	Not determined
Particle specific surface area and dustiness:	Not determined
Nanoform of particles:	Not determined

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available.

10.2. Chemical stability

This product is stable under recommended storage and handling conditions.

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10.3. Possibility of hazardous reactions

Electrolytes and electrodes may react with water or moisture, which may cause serious damage at the cells.

10.4. Conditions to avoid

Avoid exposure to heat, direct sunlight and open flame. Do not puncture, crush or incinerate. Keep away from sparks and other ignition sources.

10.5. Incompatible materials

Not available

10.6. Hazardous decomposition products

None during normal operating conditions. If cells are opened, hydrogen fluoride and carbon monoxide may be released.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity:	Based on available data, the classification criteria are not met.
Skin corrosion/irritation:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Based on available data, the classification criteria are not met.
Respiratory or skin sensitization:	Based on available data, the classification criteria are not met.
Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
Summary of evaluation of the CMR properties:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties:

Based on available data, the classification criteria are not met.

11.2.2. Other information

Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute (short-term) aquatic toxicity:	No further relevant information available.
Chronic (long-term) aquatic toxicity:	No further relevant information available.

12.2. Persistence and degradability

No further relevant information available.

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12.3. Bioaccumulative potential

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

12.5. Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6. Endocrine disrupting properties

No further relevant information available.

12.7. Other adverse effects

No further relevant information available.

12.8. Additional information

No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment method**13.1.1. Product / Packaging disposal:**

The product is subject to Battery Regulation 2023/1542/EU and other relevant legislation. Do not place the product in normal or domestic waste. Dispose of properly according to local law.

13.1.2. Waste treatment-relevant information:

European waste catalogue

16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST

16 06 00 batteries and accumulators

16 06 05 other batteries and accumulators

13.1.3. Sewage disposal-relevant information:

No further relevant information available

13.1.4. Other disposal recommendations:

No further relevant information available

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

UN-No. (ADR)	3480
UN-No. (IMDG)	3480
UN-No. (IATA)	3480
UN-No. (RID)	3480

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14.2 UN proper shipping name

UN-No. (ADR)	LITHIUM ION BATTERIES
UN-No. (IMDG)	LITHIUM ION BATTERIES
UN-No. (IATA)	LITHIUM ION BATTERIES
UN-No. (RID)	LITHIUM ION BATTERIES

14.3 Transport hazard class(es)

ADR	9
IMDG	9
IATA	9
RID	9

14.4 Packing group


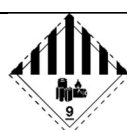


ADR	Not applicable
IMDG	Not applicable
IATA	Not applicable
RID	Not applicable

14.5 Environmental hazards:

Dangerous for the environment	No
Marine pollutant	No

14.6 Special precautions for user

Label

ADR	9A	
IMDG	9A	
IATA	9A	
RID	9A	

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Overland Transport

Classification code (ADR)	M4
Special provisions (ADR)	230, 310, 348, 376, 377, 387, 636, 677
Limited quantities (ADR)	0
Packing instructions (ADR)	P903, P908, P909, P910, P911
Transport category (ADR)	2
Tunnel restriction code (ADR)	E

Marine Transport

Special provisions (IMDG)	230, 310, 348, 376, 377, 384, 387
Limited quantities (IMDG)	0
Packing instructions (IMDG)	P903, P908, P909, P910, P911
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-I
Stowage category (IMDG)	A

Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code.
No additional information available

Air Transport

PCA packing instructions (IATA)	forbidden
PCA max net quantity (IATA)	forbidden
CAO packing instructions (IATA)	965
Special provisions (IATA)	A88, A154, A183, A201, A213, A331, A334, A802

Rail Transport

Special provisions (RID)	230, 310, 348, 376, 377, 387, 636
Limited quantities (RID)	0
Packing instructions (RID)	P903, P908, P909, P910, P911
Carriage prohibited (RID)	No

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

This product is a manufactured article (battery) as defined under Article 3(3) of Regulation (EC) No. 1907/2006 (REACH). Therefore, it is not subject to classification or labelling under Regulation (EC) No. 1272/2008 (CLP) or to the requirement to provide a Safety Data Sheet under Article 31 of REACH.

Relevant information on safe use and environmental precautions is communicated to downstream users in accordance with Article 32 of REACH.

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Labelling, marking, and information requirements applicable to this product are defined under Regulation (EU) 2023/1542 on Batteries and Waste Batteries (EUBR).

The manufacturer ensures compliance with all applicable provisions of the EUBR, including requirements related to substance restrictions (Annex I and II of Regulation (EU) 2023/1542), labelling and marking (Annex VI), due diligence, supply chain transparency, and carbon footprint reporting (Articles 48–72).

Transport of this product may be subject to the provisions of the UN Manual of Tests and Criteria, Part III, Subsection 38.3, and relevant international transport regulations (ADR, IMDG, IATA RID).

15.1.2. National regulations

US Material Safety Data Sheets (MSDS) are a sub-requirement of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR Subpart 1910.1200. This Hazard Communication Standard does not apply to various subcategories including anything defined by OSHA as an "article". Because our batteries are defined as "articles", they are exempted from the requirements of the Hazard Communication Standard

15.2. Chemical Safety Assessment

CSA is not carried out.

SECTION 16: OTHER INFORMATION

This information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of EMBS' knowledge or obtained from sources believed by EMBS to be accurate.

EMBS does not assume or accept any legal responsibility for use of or reliance upon this information.

Before using any product, READ AND UNDERSTAND THE LABEL AND PRODUCT LITERATURE

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA: International Air Transport Association

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

vPvB: very Persistent and very Bioaccumulative

PBT: Persistent Bioaccumulative Toxic

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

EUBR: European Union Battery Regulation (EU) 2023/1542 on Batteries and Waste Batteries