

X O L T A	MATERIAL SAFETY DATA SHEET	Version:01 Date:15-09-2023 Replace version: N/A
XOLTA BAT-80 rechargeable battery system	The information and recommendations set forth herein are made in good faith and are believed to be accurate at the date of preparation.	

1-Product and Supplier Identification

1.1	Product name	XOLTA BAT-80 rechargeable battery system
1.2	Type	Rechargeable and prismatic Li-ion battery
1.3	Company	Xolta Mileparken 1, 2740 Skovlunde Denmark +45 70 60 20 17 Support@xolta.com
1.4	Nominal Capacity	105 Ah
1.5	Nominal Energy	80.64 kWh
1.6	Nominal voltage	768 V
1.7	Maximum Voltage	840V
1.8	Battery weight (batteries only)	480Kg
1.9	Battery Cells manufacturer	Hubei Jinquan New Material Co., Ltd NO.68, Jinnan Avenue, Jingmen Hi-tech Zone, Jingmen City, Hubei Province, P.R.China
1.10	Emergency contact	112 Available (24/7)
1.11	Legal remarks	
	Legal remarks (EU)	These batteries are not “substances” or mixtures according to Regulation (EC) No190772006 EC. Instead, they must be regarded as “articles”. No substances are intended to be released during handling.
	General remarks	This information is provided as a service to our customers. The details presented are in accordance with our present knowledge and experience. They are not contractual assurances of product attributes.



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2-Hazard Identification

2.1 Hazard classification and Hazard Statement:

The battery system is installed inside a protective case and is not expected to expose users to hazards under normal use conditions. The risk of exposure occurs only if the protective chassis and battery are mechanically, thermally, or electrically abused and compromised. If this occurs, exposure to spontaneously released gases and electrolyte solutions contained within the cells may occur due to contact with eyes, skin, and ingestion. Also, can be a risk of electric shock.

- H226- Flammable Liquid and vapor (Category 3)
- H315-Causes Skin irritation (Category 2).
- H319-Causes serious eye irritation (Category 2A).

2.2	GHS Label Elements	
2.2.1	Pictogram	
2.2.2	Signal Word	WARNING
2.2.3	Precautionary	If medical advice need, have the product container, label or this document in hand.
2.2.4	Statment	Keep out of reach of children. Read the MSDS before use. Wear protective gloves/eye and face protection. In case of fire: Use ABC dry chemicals to extinguish. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.
2.2.5	PPE	Always use the proper equipment for the situation. 

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3-Composition /information on ingredients

Hazardous Ingredients (Chemical Name)	Chemical Formula	CAS Number	Weight %
Lithium iron phosphate	LiFePO ₄	15365-14-7	38
Lithium Hexafluorophosphjate	LiPF ₆	21324-40-3	19
Aluminium	Al	7429-90-5	12
Graphite	C	7782-42-5	19
Copper	Cu	7440-50-8	9
Polyethylene	-(CH ₂) _n -	9002-88-4	3
SUM			100%

4- First-aid Measures

Our Energy Systems has a lithium-ion battery pack that contains organic electrolyte and is contained in a protective case. Risk of exposure occurs only if the cell is mechanically, thermally, or electrically abused to the point of compromising the enclosure. If the battery is physically damaged can result in gases or electrolyte leakage, the following initial care measures should be taken if a person is exposed to the gases or electrolyte.

4.1 Description of First-aid Measures

Exposure	First aid measures	
4.1.1	General Advice	Show this safety data sheet to the medical professional in attendance
4.1.2	Eye contact	Irrigate thoroughly with water for at least 15 minutes. Obtain medical attention.
4.1.3	Skin contact	Remove contaminated clothes and rinse skin with plenty of water for 15 minutes. Obtain medical attention.
4.1.4	Inhalation	Remove from exposure and move to fresh air immediately. Use oxygen if available. Obtain medical attention.
4.1.5	Ingestion	Wash out mouth with water and give plenty water to drink. Obtain medical attention.


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5-Fire Fighting Measures

5.1	Extinguishing media ABC dry chemical fire extinguisher. Copious amounts of cold water are an effective extinguishing medium for lithium batteries. Dry powder, sand, earth may be used.
5.2	Hazardous Combustion Products CO, CO ₂ , HF, Phosphorus Fluoride
5.3	Fire protection equipment The firefighter should wear a gas mask and full fire-fighting suit.

6-Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures Evacuate personnel to a safe area and give first aid to injured victims. Eliminate all ignition sources (no smoking, sparks, flames, hot equipment) in the immediate area around the spill. Do not touch or walk-through spilled material. Avoid breathing vapors. Ensure adequate ventilation.
6.2 Environmental Precautions Absorb spilled material with non-combustible, non-reactive absorbent. Prevent migration into soils sewers and natural waterways.
6.3 Methods and Materials for Containment and Clean-Up Clean any residual electrolyte and liquid using non-combustible, non-reactive absorbent. Ensure that clean-up procedures do not expose spilled material to moisture. Containerize and place all leaking batteries in individual containers that are leak-proof, nonconductive, non-combustible and have sufficient absorbent to absorb the full amount of liquid from the battery. Place used spill response materials in leak-proof, non-conductive, non-combustible containers that have absorbent. Avoid the release of collected materials. Do not place the collected materials near open flame.

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7-Handling and Storage

7.1	Precautions for Safe Handling <ul style="list-style-type: none"> ▪ Avoid mechanical damage of Xolta energy systems. Do not open or disassemble the Xolta systems. ▪ Avoid short circuiting the cell. Remove jewelry items. ▪ Keep away from open flames, hot surfaces, and sources of ignition.
7.2	Conditions for Safe Storage <ul style="list-style-type: none"> ▪ Store in a protected battery warehouse area on pallets or similar devices to enable any leaks to be visibly observed upon inspection and to ensure the items do not encounter water or a salty breeze. ▪ Store away from heat sources. ▪ Keep it in the closed original container. ▪ Store in an upright position and in areas that are not likely to be damaged or disturbed by personnel, equipment, or vehicles. ▪ Do not store unboxed items in areas with a source of spark generation within 30 cm, in direct sunlight, in direct exposure to exhaust gases, such as from automobiles, or in places with continuous or intermittent vibration.
7.3	Storage Conditions and Temperature <ul style="list-style-type: none"> ▪ Avoid direct sunlight or storing close to heat sources ▪ Range temperature-0°C - 35°C ▪ If the product has been stored for more than 12 months in its original package, DO NOT ship it before contacting Xolta support team for technical guidelines

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8-Exposure controls/personal protective equipment

Item	Description
Ventilation Requirements	Not necessary under normal conditions. Room ventilation may be required in areas where there are open or leaking batteries.
Respiratory protection	Not necessary under normal conditions. Avoid exposure to electrolyte fumes from open or leaking battery. In all fire situations use self-contained breathing apparatus.
Eye Protection	Not necessary under normal conditions. Wear safety glasses with side shields if handling an open or leaking battery.
Hand Protection	Not necessary under normal conditions. Use neoprene or natural rubber gloves if handling an open or leaking battery.

9-Physical and Chemical Properties

Appearance	Prismatic form
Colour	White
Odor	Odorless
Flammability	Not applicable unless individual components exposed
Solubility (water)	Not applicable unless individual components exposed
Solubility (other)	Not applicable unless individual components exposed

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10-Stability and Reactivity

Stability	Product is stable under the conditions described in Section 7.
Conditions to Avoid	Avoid keeping above 70°C or incinerate. Do not deform, crush, disassemble, overcharge, short circuit or expose over a long period to humid conditions.
Materials to avoid	Oxidizing agents, alkalis, water
Hazardous Decomposition products	No decomposition if stored and applied as directed.

11-Toxicology Information

<ul style="list-style-type: none"> ▪ If appropriately handled and if in accordance with the general hygienic rules, no damage to health has become known ▪ If inappropriately handled, the following health risks may result: 	
Inhalation:	Lung irritant
Skin contact:	Skin irritant
Eye contact:	Eye irritant
Ingestion:	Poisoning if swallowed.

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12-Environmental information

Ecological injuries are not known or expected under normal use. Do not flush into surface water or a sanitary sewer system.

13-Disposal

Item	Consideration
Advice on disposal	For recycling consult local battery recyclers and always use proper PPE.
Contaminated packaging	Disposal in accordance with local regulations and always use proper PPE.

14-Transport Information

Item	Description
Proper Shipping Name	Lithium-ion batteries
Hazard Class: 9	Miscellaneous Dangerous Goods
Identification Number	UN3480
Pictogram	
Packing Group	II (per GHS Regulations); No packing groups specified under US DOT regulations. When transported must be done strapped in a pallet wood, secure and not touch each other's.
Packing Instructions	965-IA (IATA Dangerous Goods Regulations 58th Edition)
Environmental Hazard	Follow all applicable local, requirements when identifying additional environmental hazards.
Label for transportation	Lithium battery label Class 9 hazard label

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15-Information on regulation

Location	Regulation
European Union	<p>Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I: Not listed.</p> <p>Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II: Not listed.</p> <p>Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended: Not listed.</p> <p>Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals: Not listed.</p> <p><i>Other EU Regulations</i></p> <p>Directive 96/82/EC (Seveso II) on the control of major accident hazards involving dangerous substances: Not listed.</p> <p>Directive 94/33/EC on the protection of young people at work: Not listed.</p> <p>This Safety Data Sheet complies with the requirements of Regulation (EC) No. 1907/2006 and amended on 28 May 2015 by (EU) 2015/830.</p> <p>Regulation (EC) No. 1272/2008 These products are not classified as hazardous.</p>
Additional regulatory information not provided elsewhere	58th Edition of the IATA Dangerous Goods Regulations (DGR).

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16-Other information

This file is only effective to the batteries (LF105) provided by commissioner (Hubei Jinquan New Material Co., Ltd.), which is manufactured by Applicant. The commissioner provides the composition information of batteries and promises its integrity and accuracy. Users should read this file carefully and use the batteries in the correct method. Guangdong Inspection and Quarantine Technology Center doesn't assume responsibility for any damage or loss because of misuse of batteries.