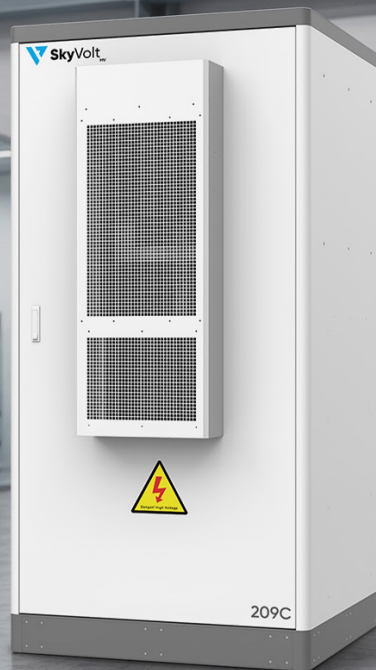




THE ULTIMATE
BATTERY SOLUTION



Material Safety Data Sheet 2026

Section 1: Substance/Mixture

1.1 Product identifier

Product Name	Lithium-ion Battery Energy Storage Cabinet (Model: SkyVolt MV - 209C)
Product Description	Rated: 768V, 314Ah, 241kWh Weight: Appr: 2296.0kg Dimensions: 1150.0*1268.0*2300.0(mm)

1.2 The recommended or intended use of the Product

Recommended Use	Used for industrial or commercial Energy storage applications
Restrictions Use	No information available

Section 2: Hazards Identification

2.1 Classification of the Product

This product is not classified under GHS Part 2: Physical Hazards, Part 3: Health Hazards, Part 4: Environmental. Hazards and does not involve relevant GHS label information.

2.2 Other Hazard description

Possible hazards caused by improper behavior	Under normal conditions, operating and using according to the manufacturer's instructions will not cause harm. However, violations and misuse may lead to overcharging, overdischarging, overheating, and other issues with the product, which may cause battery leakage, thermal runaway, fire or explosion risks.
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Section 3: Composition/Information on Ingredients

Description	Chemical name	CAS No.	Weight-%
Internal cell composition	Lithium iron phosphate (LiFePO ₄)	15365-14-7	20-40
	Lithium hexafluorophosphate	21324-40-3	10-20
	Aluminum	7429-90-5	10-20
	Graphite	7782-42-5	10-20
	Copper	7440-50-8	7-13
	Poly(vinyl chloride)	9002-86-2	1-5

Section 4: First aid measures

4.1 Description of first aid measures

Under normal conditions, direct contact with lithium-ion batteries by the human body does not pose any harm. Only in the event of battery leakage, if body parts come into contact with the leaked substance, the following measures should be taken:

Inhalation	If inhaled, quickly leave the scene and move to a place with fresh air. If breathing is difficult, oxygen should be supplied; If breathing stops, artificial respiration should be performed immediately and rescue should be called.
Ingestion	Immediately rinse your mouth with clean water and seek medical attention promptly.
Eye contact	Lift the eyelids and rinse with flowing water for at least 15 minutes. If irritation persists, seek medical attention immediately.
Skin contact	Immediately rinse the skin with soap and plenty of water after skin contact.

Section 5: Fire-fighting Measures

Hazardous characteristics	During a fire, flammable gases, harmful smoke, harmful gases, and high-temperature steam will be released.
Harmful combustion products	CO, CO ₂ , Hydrocarbon mixture gas, H ₂ , HF, etc.
Fire extinguishing methods and extinguishing agents	It is recommended to use fire hydrants to spray water or water-based fire extinguishers to extinguish the fire.
Suggestions for firefighters	Firefighters should wear self-contained breathing apparatus, explosion-proof helmets, explosion-proof vests, and high-temperature resistant firefighting suits. The key to extinguishing fires is to use a large amount of water to cool down and prevent thermal runaway and diffusion, as well as to maintain ventilation and exhaust on site to prevent explosions.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Immediately turn off the power supply of the on-site facilities, turn on the on-site exhaust system or doors and windows to maintain ventilation, activate the manual sound and light alarm system, and evacuate the site immediately. Respiratory protection should be taken during the evacuation process.
For emergency personnel	Emergency personnel should wear self-contained breathing apparatus or composite protective masks that prevent particulate matter, activated carbon, and acidic gases, high-temperature resistant firefighting suits, high-temperature resistant gloves, explosion-proof helmets, and explosion-proof vests when entering the site. It is recommended to use fire hydrants, water guns, or water-based fire extinguishers to extinguish the fire first.

6.2 Environmental precautions

Batteries and leaked substances should be prevented from being directly discharged into sewers and garbage bins. Professional recycling companies should be contacted for recycling and disposal.

6.3 Methods and materials for containment and cleaning up

Immediately soak the leaking battery in water and contact a professional recycling company for recycling after soaking for 24 hours. For the leaked residue, it is recommended to use sand to adsorb or soak it in water for treatment.

Section 7: Handling and Storage

7.1 Precautions for safe handling

- Do not short-circuit or reverse the positive and negative terminals of the battery, and do not mix the input and output interfaces.
- Do not put the battery into fire or high temperature environment.
- Do not forcefully break or puncture the battery casing.
- Do not expose the battery to mechanical impact, shock, or drop.
- Do not abuse beyond the conditions specified in the manufacturer's instructions.

7.2 Conditions for safe storage

Storage and use should be carried out in accordance with the manufacturer's instructions, away from open flames and high voltage electricity, and the storage environment should prioritize ventilation and coolness.

Section 8: Exposure control/Personal Protection

8.1 Control parameters

Occupational Exposure Limit, OEL	No relevant regulations
Biological limit values	No relevant regulations
Predicted No Effect Concentration (PNEC)	No relevant regulations
Derived No effect level, DNEL	No relevant regulations

8.2 Engineering controls

There is no requirement for engineering control when operating undamaged batteries. For damaged batteries, personal protective equipment should include protective gloves, protective masks, and safety goggles.

On site emergency response control should maintain continuous ventilation, equipped with necessary exhaust systems, fire emergency response materials (such as fire blankets, fire water guns, fire water buckets, water-based fire extinguishers, high-temperature resistant firefighting suits, explosion-proof helmets, explosion-proof vests, etc.), and also set up fire emergency evacuation routes.

8.3 Personal protective equipment

Eye/face protection	Under normal conditions, no relevant protection is required for the battery. When abnormalities occur, it is necessary to wear heat-resistant goggles and face shields.
Hand protection	Under normal conditions, no relevant protection is required for the battery. When abnormalities occur, acid and alkali resistant chemical protective gloves must be worn.
Respiratory protection	Under normal conditions, no relevant protection is required for the battery. When abnormalities occur, it is necessary to wear a composite protective mask that prevents particulate matter and activated carbon from acidic gases.
Skin and body protection	Under normal conditions, no relevant protection is required for the battery. When abnormalities occur, it is necessary to wear heat-resistant firefighting clothing.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid
Color/Shape	White almost cuboid
Odour	Odorless
Melting point/freezing point	No information available
Boiling point, initial boiling point and boiling range	Not applicable
Flammability	No information available
Upper/lower flammability or explosive limits	No information available
Flash Point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature pH	Not applicable
Kinematic viscosity	Not applicable
Solubility	Not applicable
Partition coefficient n-octanol/water(log value)	Not applicable
Vapor pressure	Not applicable
Density and/orrelative density	Not applicable
Relative vapour density	Not applicable
Particle characteristics	No information available

Section 10: Stability and reactivity

Stability	Stable under normal temperatures and pressures.
Incompatibility	Oxidizing agents
Conditions to Avoid	Heat and open flame, short circuit, and water.
Hazardous polymerization	Will not occur
Decomposition Products	CO, CO ₂ , Hydrocarbon mixture gas, H ₂ , HF, etc.

Section 11: Toxicological Information

11.1 Information on hazard classes

Acute toxicity	Not applicable
Skin corrosion/irritation	Only when the battery ruptures, the leaked electrolyte vapor or smoke from a ruptured battery can corrode and irritate the skin.
Serious eye damage/eye irritation	Only when the battery ruptures, the leaked electrolyte vapor or smoke can cause damage and irritation to the eyes.
Sensitization	Not applicable
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive toxicity	Not applicable
STOT -single exposure	Not applicable
STOT -repeated exposure	Not applicable
Aspiration hazard	Not applicable

Section 12: Ecological Information

Toxicity	No information available
Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available

Section 13: Waste Disposal

Waste Disposal methods	Suggest disposing or recycling in accordance with national and regional regulations
Attention for waste disposal	Waste batteries cannot be treated as ordinary garbage, cannot be thrown into fire or placed at high temperatures, cannot be disassembled, punctured, crushed, or processed similarly. The best way is to recycle and reuse them.

Section 14: Transport Information


UN number	ICAO/IATA (DGR 67th)	IMDG-CODE (Amdt 42-24)	ADR (ADR 2025)	RID (RID 2025)
	UN 3480	UN 3480	UN 3480	UN 3480
UN proper shipping name	UN 3480	Lithium ion batteries (including lithium ion polymer batteries)		
Transport hazard class(es)	9			
Environmental hazards	Non marine pollutants			
Special precautions for user	<p>Before transportation, ensure that the battery is not fully charged, generally controlled within 30% SOC or in accordance with relevant national or local regulations.</p> <p>Before transportation, ensure that the battery is turned off, powered off, or disconnected, and ensure that the positive and negative terminals of the battery are insulated to prevent short circuits.</p> <p>If there is any odor, swelling, leakage, or smoking during transportation, please immediately isolate the abnormal battery safely and prepare necessary fire-fighting measures on site. Contact the manufacturer as soon as possible to seek a disposal plan.</p> <p>Before transportation, each battery design must pass the tests required by Section 38.3 of the UN Manual of Tests and Criteria. UN38.3 Report Number: KS2410S4282B01.</p>			

Section 15: Regulatory Information

15.1 Regulatory information

International Civil Aviation Association - Dangerous Goods Regulation (IATA-DGR)
Recommendation on the Transport of Dangerous Goods Model Regulations (TDG)
International Maritime Dangerous Goods (IMDG-CODE)
Agreement on the International Carriage of Dangerous Goods by Road (ADR)
International Railway Transport Dangerous Goods Regulations (RID)
Agreement on the International Carriage of Dangerous Goods by Inland Waters (ADN)
Recommendations on the Transport of Dangerous Goods-Manual of Tests and Criteria
Technical Instructions for the Safe Transport of Dangerous Goods
Classification and code of dangerous Goods
Occupational Safety and Health Act (OSHA)
Toxic Substance Control Act (TSCA)
Consumer Product Safety Act (CPSA)
Federal Environmental Pollution Control Act (FEPCA)
The Oil Pollution Act (OPA)
Superfund Amendments and Reauthorization Act Title III (302/311/312/313) (SARA)
Resource Conservation and Recovery Act (RCRA)
Safety Drinking Water Act (CWA)
California Proposition 65
Code of Federal Regulations (CFR)

Section 16: Other Information

UN number	ICAO/IATA (DGR 67th)	IMDG-CODE (Amdt 42-24)	ADR (ADR 2025)	RID (RID 2025)
Reference	National standard of People's Republic of China. (GB/T 16483-2008) Safety data sheet for chemical products-Content and order of sections, National standard of People's Republic of China. (GB/T 17519-2013) Guidance on the compilation of safety data sheet for chemical products.			
Report Revision History	First Edition			
Report Template Version	Version: SDS-R6, creation date: 2025.			
Sample photo				
Disclaimers	<p>This SDS report is only for batteries. The content of the report is based on the information provided by the applicant regarding the composition and content, as well as our existing knowledge. It is only for guidance purposes. If the battery is used as a component in other products, the information in this SDS report may not be applicable. The user of this SDS must make independent judgments on the correctness and completeness of the content, determine its applicability based on the actual situation, and bear relevant legal responsibilities for the consequences of use. Users should carefully read this document and use the battery in the correct way. KSIGN(Guangdong) Testing Co., Ltd. shall not be liable for any damage or loss caused by improper use of the battery.</p>			