Safety Data Sheet

NOTE ON THIS SAFETY DATA SHEET

Product Identifier

Product Name	Rechargeable LFP Battery BXA-8kWh
Applicable Models	BXA-8kWh-1P/2P/3P/4P

Other Means of Identification

SDS #	SDS005
Synonyms	Lithium Iron Phosphate (LiFePO4, LFP)
Proper Shipping Name (ADG Code)	LITHIUM ION BATTERIES(including lithium ion polymer batteries)
UN/ID No	UN3480

Recommended Use of the Chemical and Restrictions on Use

Recommended Use	Residential Energy Storage

Details of the Manufacturer of the Safety Data Sheet

Manufacturer Name	Jiangsu Weiheng Intelligent Technology Co., Ltd.
Manufacturer Address	Sheng Xiang, Yaxi Community, Luoshe Town, Huishan District, Wuxi City, Jiangsu Province, P.R. China
Manufacturer Post Code	214000
Manufacturer Telephone	+86 4008776999
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Details of the Importer of the Safety Data Sheet

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1. Identification of substance	
Product Name	Rechargeable LFP Battery BXA-8kWh / 25.6V 314Ah 8kWh
Other Name	None
Chemical Name	None
Recommended Use	Residential Energy Storage
Manufacturer	Jiangsu Weiheng Intelligent Technology Co., Ltd.
Address	Sheng Xiang, Yaxi Community, Luoshe Town, Huishan District, 214000,Wuxi City, Jiangsu Province, P.R. China
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WEB or E-mail	xu.jiangtao@weiheng-tech.com
Emergency Phone Number	+86-0510-83809998 or Call your nearest poison control centre

2. Hazards identification	
GHS classification	The product meets the definition of "article". In the Globally Harmonized system of Classification and Labeling of Chemicals (GHS), the "articles" defined by the US Occupational Safety and Health Administration "Hazard Communication Standard" (29 CFR 1910.1200) or similar definitions do not fall within the scope of this system. [Rev. 11 (2025) Part 1.3.2.1.1]. According to GHS system (11th revised edition), not classified as a hazardous chemical.
GHS Pictograms	—
Signal words	—
Hazard statements	—
Precautionary Statement Prevention	—
Precautionary Statement Response	—
Precautionary Statement Storage	—
Precautionary Statement Disposal	—
Other hazards which do not result in classification	Not available.

3. Composition/information on ingredients
☐**Substances**
√**Mixtures**
Component Information

Component	CAS number	EINECS number	Mass(%wt)
Lithium Iron Phosphate Carbon Coated	15365-14-7	604-917-2	36~42
Lithium hexafluorophosphate	21324-40-3	244-334-7	18~25
Graphite	7782-42-5	231-955-3	17~22
Copper Foil	7440-50-8	231-159-6	5~8
Aluminum Foil	7429-90-5	231-072-3	3~6

Note:1. Unless a component presents a severe hazard, it does not need to be considered in the SDS if the concentration is less than 1%.

4.First-aid measures

NOTE TO PHYSICIAN	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.
After inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Get immediate medical attention.
After skin contact	In case of contact with substances in the battery, immediately flush skin thoroughly with soap and plenty of water. Remove and isolate contaminated clothing and shoes. If irritation persists, get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.
After eye contact	In case of contact with substances in the battery, immediately flush eyes with plenty of running water or normal saline for a few minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention immediately.
After ingestion	Rinse mouth. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Loosen tight clothing such as a collar, tie, belt or waistband. Do not use mouth-to-mouth method if victim ingested the substance. Seek immediate medical attention.
Most important symptoms / effects, acute and delayed	The battery's electrolyte can irritate skin, eyes, and mucosal tissues.

5. Fire-fighting measures

Suitable extinguishing agents	Water (cooling), use a HFC (hydrofluorocarbon) clean-agent fire extinguisher or alcohol resistant foam fire extinguishers. Heptafluoropropane and perfluorohexanone have better extinguishing effects.
Special hazards caused by the material, its products of combustion or flue gases	Cell may vent when subjected to excessive heat-exposing battery contents. Can be released in case of fire: carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen fluoride, hydrogen cyanide, benzene, toluene, methane, lithium oxide fumes, phosphorus

	oxides, irritating and toxic fumes and gases.
Protective equipment for fire-fighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask, insulating gloves, insulating boots, etc.

6. Accidental release measures

Person-related safety precautions	If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Avoid skin and eye contact or inhalation of vapors.
Measures for environmental protection	Prevent further leakage or spillage if safe to do so. Do not allow material to be released to the environment without proper governmental permits.
Measures for cleaning/collecting	If batteries show signs of leaking, avoid skin or eye contact with the material leaking from the battery. Use chemical resistant rubber gloves and non-flammable absorbent materials for clean up. Mix with inert material (e.g. dry sand, vermiculite) and transfer to sealed container for disposal.
Additional information	See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

7. Handling and storage

Handling	
Information for safe handling	Operators should be trained and strictly abide by the operating procedures. It is recommended that operators wear general protective clothing and safety gloves. Keep away from fire, heat source and direct sunlight. Smoking is strictly prohibited in the workplace. Provide ventilation systems and equipment in the workplace. Such batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Avoid mechanical or electrical abuse. More than a momentary short circuit will generally reduce the battery service life. Avoid reversing battery polarity within the battery assembly. In case of a battery unintentionally be crushed, rubber gloves must be used to handle all battery components. Avoid contact with eyes, skin. Avoid inhalation. Store separately from strong oxidizing agents, corrosives.
Information about protection against explosions and fires	Avoid mechanical and electrical abuse. Do not short circuit or install incorrectly. Batteries may explode or cause burns if disassembled, crushed, recharged or exposed to high temperatures. Install batteries in

	accordance with equipment instructions.
STORAGE	
Requirements to be met by storerooms and containers	Storage temperature is -20 ℃～55 ℃. Avoid physical or electrical abuse. Prohibit high-temperature storage. Storage preferably in cool, dry and well-ventilated area, which is subject to little temperature change. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.
Information about storage in one common storage facility	Store in a cool, dry and well-ventilated area. Keep away from fire, heat source and direct sunlight. Such batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Materials to Avoid: strong oxidizing agents, flammables, explosive material, corrosives, harmful substances.
Further information about storage conditions	The storage area shall be equipped with corresponding types and quantities of fire-fighting equipment, leakage emergency treatment equipment and appropriate materials.

8. Exposure controls/personal protection

Limit Values for Exposure

Component	**CAS number**	**ACGIH TLV-TWA mg/m³**	**ACGIH TLV-STEL mg/m³**	**NIOSH REL-TWA mg/m³**	**NIOSH REL-STEL mg/m³**
Lithium Iron Phosphate Carbon Coated	15365-14-7	N.E.	N.E.	N.E.	N.E.
Lithium hexafluorophosphate	21324-40-3	N.E.	N.E.	N.E.	N.E.
Graphite	7782-42-5	2	N.E.	2.5	N.E.
Copper Foil	7440-50-8	0.2	N.E.	1	N.E.
Aluminum Foil	7429-90-5	1	N.E.	10 (total) 5 (resp)	N.E.

Appropriate engineering controls	Use ventilation system and equipment. In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Provide safety shower and eye wash equipment.
General protective and hygienic measures	Not necessary under conditions of normal use. Personal protection is recommended for venting battery. No smoking, drinking and eating at working site. Wash thoroughly after handling.
Personal protective equipment	Personal protection is recommended for venting battery: respiratory protection, protective gloves, protective clothing and safety glass with side shields.
Breathing equipment	When workers are facing high concentrations they must use appropriate certified respirators. Respiratory protection is not

	necessary under conditions of normal use.
Protection of hands	Not necessary under conditions of normal use.
Eye/Face protection	Not necessary under conditions of normal use. Use safety glasses with side shields or safety goggles as mechanical barrier for prolonged exposure if necessary.
Body protection	Not necessary under conditions of normal use. Full set of anti chemical reagent overalls, flame retardant antistatic protective clothing if necessary, choose body protection according to the amount and concentration of the dangerous substance at the work place.

Note: 1. N.E. means not established.

9.Physical and chemical properties

Physical state	Lithium Ion Battery Pack, silver gray prismatic Size (L*W*H): 775*270*330 (mm) Weight: 80.2 kg
Colour	See Physical state
Odour	No pungent odour
Melting point/freezing point	No data available
Boiling point or initial boiling point and boiling range	No data available
Flammability	No data available
Lower and upper explosion limit/ flammability limit	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Kinematic viscosity	No data available
Solubility	No data available
Partition coefficient: n-octanol/water (log value)	No data available
Vapour pressure	No data available
Density and/or relative density (water=1)	No data available
Relative vapour density (air=1)	No data available
Particle characteristics	No data available

10. Stability and reactivity

Reactivity	No data available.
Chemical stability	This is a stable product under recommended storage conditions.
Possibility of hazardous reactions	No polymerization.
Conditions to avoid (e.g. static discharge, shock or vibration)	Fire source, heating source, disassemble, external short circuit, crushes, deformation, high temperature, direct sunlight, high humidity, immerse in water or overcharge, etc.
Incompatible materials	Explosives, flammables, strong oxidants and corrosives. If leaked, forbidden to contact with strong oxidizing agents, mineral acids, strong alkalis, etc.
Hazardous decomposition products	May include metal oxides, carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen fluoride, hydrogen cyanide, benzene, toluene, methane, phosphorus oxides and other toxic smoke and gas.

11.Toxicological information

Routes of Entry: Dermal contact, eye contact, inhalation, ingestion.

Acute Toxicity	
Lithium hexafluorophosphate (CAS 21324-40-3)	LD50 (Oral, rat) >50-300 mg/kg LC50 (Inhalation, rat) N/A LD50 (Dermal, rabbit) N/A
Skin corrosion/Irritation	Lithium hexafluorophosphate (CAS 21324-40-3): Causes skin corrosion.
Serious eye damage/irritation	Lithium hexafluorophosphate (CAS 21324-40-3): Causes serious eye damage.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Lithium hexafluorophosphate (CAS 21324-40-3): Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified
Chronic Effects	Not classified
Further Information	In the event of exposure to internal contents, moderate or severe irritation, burning and dryness of the skin may occur, and may damage the nerves of the target organs. No detailed toxicological study.

12. Ecological information

Ecotoxicity

Aquatic Toxicity	Test & Species
	96 Hr LC50 fish: N/A 48 Hr EC50 Daphnia: N/A

	72 Hr EC50 Algae: N/A
Persistence and degradability	Not available
Bioaccumulative potential	Not available
Mobility in soil	Not available
Additional Information	May cause water or soil pollution.

13. Disposal considerations

WASTE DISPOSAL INSTRUCTIONS

Contact a qualified professional waste disposal service to dispose of this material.
Dispose of in accordance with local environmental regulations or local authority requirements.

14. Transport information

The Recommendation of Transport of Dangerous Goods(TDG)

UN Number	UN 3480
Proper Shipping Name	LITHIUM ION BATTERIES
Class/Division	Class 9 Miscellaneous Dangerous Substances and Articles
Package Group	—
Subsidiary risk	—
labeling pictogram	

Note: The sample is a rechargeable Lithium Ion Battery Pack with a Watt-hour rating in excess of 100Wh, which contains 8 series connected battery cells, and passed the tests required by UN 38.3. Cells and batteries incorporate a safety venting device. Cells and batteries are properly protected to prevent short circuits, and have a high quality management programme can be transported as mentioned above. Cells or batteries shall be packed in packagings so that the cells or batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packaging. The completed package must meet the Packing Group II performance requirements. In addition, for a cell or a battery with a gross mass of 12 kg or more employing a strong, impact resistant outer casing: (a) Strong outer packagings; (b) Protective enclosures (e.g., fully enclosed or wooden slatted crates); or (c) Pallets or other handing devices. Cells or batteries shall be secured to prevent inadvertent movement, and the terminals shall not support the weight of other superimposed elements. Packagings need not meet the requirements of TDG 4.1.1.3.
Each package must be labeled with the Class 9 Lithium Battery hazard

	label (Model No.9A ,5.2.2.2.2 in TDG). According to 2.9.4 (g) of TDG (24th revised edition.), except for button cells installed in equipment (including circuit boards), manufacturers and subsequent distributors of cells or batteries manufactured after 30 June 2003 shall make available the test summary as specified in the Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5.
Maritime transport IMDG	Being same with TDG Marine pollutant (Yes/No): No EmS No.: F-A, S-I Each package must be labeled with the Class 9 Lithium Battery hazard label (Model No.9A ,5.2.2.2.2 in IMDG Code). According to 2.9.4.7 of IMDG Code (2024 Edition), except for button cells installed in equipment (including circuit boards), manufacturers and subsequent distributors of cells or batteries manufactured after 30 June 2003 shall make available the test summary as specified in the Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5.

15. Regulatory information

European/International Regulations	
OSHA:	Hazardous by definition of Hazard Communication Standard (29CFR 1910.1200).
EINECS Status:	Lithium hexafluorophosphate, Graphite, Copper Foil, Aluminum Foil are included in EINECS inventory.
EPA TSCA Status:	Lithium Iron Phosphate Carbon Coated, Lithium hexafluorophosphate, Graphite, Copper Foil, Aluminum Foil are included in TSCA inventory.
Canadian DSL/NDSL (Domestic Substances List/ Non-domestic Substances List):	Lithium Iron Phosphate Carbon Coated, Lithium hexafluorophosphate, Graphite, Copper Foil, Aluminum Foil are included in DSL / NDSL.
HMIS (Hazardous Material Identification System Ratings):	Health: 1 Flammability: 0 Physical hazard: 0 Personal protection: F (4. Severe Hazard; 3. Serious Hazard; 2. Moderate Hazard; 1. Slight Hazard; 0. Minimal Hazard)
WHMIS (Canadian Workplace Hazardous Material Identification System Ratings):	D1A, D2B, E (Lithium hexafluorophosphate), B4, D2B(Copper), B6 (Aluminum).
List of dangerous goods (GB 12268-2025)	UN Number: UN3480, Shipping Name: LITHIUM ION BATTERIES, Class or Division: 9, Packing Group: —. The recommended packaging category is PG II.

	Lithium cells and batteries listed in this report are of the types proven to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3.

16. other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

This Material Safety Data Sheet was based on the "Globally Harmonized System of Classification and Labelling of Chemicals", Recommendations on the TRANSPORT OF

DANGEROUS GOODS Model Regulations", "International Maritime Dangerous Goods Code", Dangerous Goods Regulations by the "International Air Transport Association", the National Standards and other related dangerous chemicals management laws, regulations and standards, which are periodically updated and changed. To make dangerous goods / hazardous chemicals comply with the relevant requirements of the latest management, regularly update is recommended.

This Material Safety Data Sheet has been compiled in both English and Chinese. For any discrepancies, the Chinese version shall prevail.

Abbreviations and acronyms	TDG: The Recommendation of Transport of Dangerous Goods ADR: Agreement Concerning the International Carriage of Dangerous Goods by Road RID: Regulation Concerning the International Carriage of Dangerous Goods by Rail IMDG: International Maritime Dangerous Goods Code IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air by the "International Civil Aviation Organization" (ICAO) EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent EC50: Effective concentration, 50 percent
Edit Date	24.01.2026
Update and Revise	Original edition
Edit Standard	*Globally Harmonized System of Classification and Labelling of Chemicals* Part 1.5
Revised Institution	Technology Center of Hangzhou Customs District