Material Safety Data Sheet

Report No. .....:	BOKE-200225169M
Applicant.....:	Shenzhen Dingjiasheng Technology Co., Ltd.
Applicant address...:	Room 104, No.199, Yingrenshi Old Village, Shiyan Street, Bao'an District, Shenzhen City.
Product name.....:	Lithium battery pack
Product Model.....:	7565113
Trademark.....:	--
Date of issue.....:	2020-02-25

SHENZHEN BOKE TESTING CO., LTD.
Address:
Floor 2, Complex Building, No. 438 Industrial Park, Donghuan Road, Xiner Community, Xinqiao Street, Bao'an District, Shenzhen, GuangDong, China
Web.: www.boke-lab.com, Tel.: 0755-27782934

(SHENZHEN BOKE TESTING CO., LTD.)

Material Safety Data Sheet

Product name:	Lithium battery pack		
Manufacture:	Shenzhen Dingjiasheng Technology Co., Ltd.		
Address:	Room 104, No.199, Yingrenshi Old Village, Shiyan Street, Bao'an District, Shenzhen City.		
Telephone number:	+86-18307618653	Emergency telephone:	18307618653
Fax:	--	E-mail:	2279771314@qq.com

SAMPLE DESCRIPTION:
The product is Lithium battery pack in solid state.

Version number: the 61th version

Report Record				
No.	Report No.	Date of issue	Report status	Note
1	BOKE-200225169M	2020-02-25	First issue, valid	--

Written by Jaden Pan — 2020-02-25

Approved by Mossi Pan — 2020-02-25

Inspected by Levi Lee — 2020-02-25

No.	MSDS
1	Section 1- Chemical Product & Company Identification
2	Section 2- Hazards Identification
3	Section 3- Composition/Information on Ingredients
4	Section 4- First Aid Measures
5	Section 5- Fire Fighting Measures
6	Section 6- Accidental Release Measures
7	Section 7- Handling and Storage
8	Section 8 - Exposure Controls/Personal Protection
9	Section 9- Physical and Chemical Properties
10	Section 10 – Stability and Reactivity
11	Section 11 – Toxicological Information
12	Section 12 – Ecological Information
13	Section 13 – Disposal Considerations
14	Section 14 – Transport Information
15	Section 15 – Regulatory Information
16	Section 16 – Additional Information

Section 1- Chemical Product & Company Identification			
Chinese name	--	English name	Lithium battery pack
Name of the supplier	Lu Hua Electronic Technology(Shanwei) Co., Ltd.	Address of Supplier	1-917, ZhongTai Technology Park, Donghuan 1st Road, Longhua District, Shenzhen, Guangdong, China
Tel. of the supplier	0755-21049346	Emergency tel. of supplier	13507986757
Fax of the supplier	--	Email of Supplier	356192044@qq.com

Section 2- Hazards Identification	
Hazard Description	There is no danger in normal use. Batteries cannot be disassembled, opened or broken down.
route of exposure:	Inhalation, ingestion, skin contact, eye contact.
Potential Health Effects	Inhalation: fumes from a broken battery can cause respiratory irritation. Ingestion: battery components or ingredients can cause severe chemical burns in the mouth, esophagus, and gastrointestinal tract. Skin: skin contact with the battery's internal chemicals can cause severe irritation or burns to the skin. Eyes: eye contact with the battery's internal chemicals can cause severe irritation or burns to the eyes.

Section 3- Composition/Information on Ingredients		
Composition of harmful substances	Concentration	CAS No.:
Lithium Cobalt Oxide	35-38	12190-79-3
Graphite	20-22	7782-42-5
Copper	9-10	7440-50-8
Aluminum	5-6	7429-90-5
Ethylene carbonate	14-16	96-49-1
Polypropylene	5-6	9003-07-0
Carbonate, methyl ethyl	4-5	623-53-0
Phosphate(1-), hexafluoro-, lithium	5-6	21324-40-3

Note: CAS number is Chemical Abstract Service Registry Number. N/A=Not apply.

Section 4- First Aid Measures	
Inhalation	Remove source of contamination or move victim to fresh air. Obtain medical advice.
Ingestion	Please rinse mouth thoroughly with water. Induce vomiting under the guidance of professional personage. Please seek medical treatment in time.
Skin contact	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
Eye contact	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician.

Section 5- Fire Fighting Measures	
Characteristics of Hazard	Toxic fumes, gases or vapors may evolve on burning.
Hazardous Combustion Products	Carbon monoxide, carbon dioxide, lithium oxide fumes and so on.
Fire-extinguishing Methods and Extinguishing Media	Please use dry powder fire extinguisher and other proper fire extinguishing media.
Attention in Fire-extinguishing	The firemen should put on antigas masks and full fire-fighting suits.

Section 6- Accidental Release Measures	
Personal Precautions, protective equipment, and emergency procedures	Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8.
Environmental Precautions	Prevent material from contaminating soil and from entering sewers or waterways.
Methods and materials for Containment	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.
Methods and materials for cleaning up	Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for

	proper disposal.

Section 7- Handling and Storage	
Handling	Don't handing the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery.
Storage	If the battery is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically. 1 month: -20℃~+45℃, 65±20% R.H. 3 months: 0℃~+30℃, 65±20% R.H. 6 months: 20±5℃, 65±20% R.H. Long period more than 1 month: -20℃～35℃, 65±20%R.H. Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. Keep out of reach of children. Do not expose the battery to heat or fire. Avoid storage in direct sunlight. Do not store together with oxidizing and acidic materials.

Section 8 - Exposure Controls/Personal Protection	
Engineering Controls	No engineering controls are required for handling batteries that have not been damaged. Personal protective equipments for damaged batteries should include chemical resistant gloves and safety glasses.
Personal Protective Equipment	Respiratory Protection: In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use. Not necessary under conditions of normal use. Protective Gloves: Not necessary under conditions of normal use. Other Protective Clothing or Equipment: Not necessary under conditions of normal use. Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

Section 9- Physical and Chemical Properties			
Physical State	Solid, Odorless	pH	--
Flash point(℃)	--	Explosion properties	--
Density	--	Solubility with indication of the solvent(s):	--

Section 10 – Stability and Reactivity	
Stability	Stable under normal temperatures and pressures.
Conditions to Avoid	Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.
Hazardous Decomposition Products	Toxic Fumes, and may form peroxides.
Possibility of Hazardous Reaction	If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.

Section 11 – Toxicological Information	
Irritation	In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin.
Sensitization	Not applicable.
Reproductive Toxicity	Not applicable.
Toxicologically Synergistic Materials	Not applicable.

Section 12-Ecological Information	
General note	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Anticipated behavior of a chemical product in environment/possible environmental impact/ ecotoxicity	Not applicable.
Mobility in soil	Not applicable.
Persistence and Degradability	Not applicable.

Section 13 – Disposal Considerations	
Waste Treatment	Recycle or dispose of in accordance with government, state & local regulations.
Attention for Waste Treatment	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling.

Section 14 – Transport Information

This report applies to by sea, by air and by land;
The Lithium battery pack (model:655085) tested according to the requirements of the UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria" Part III, subsection 38.3;
The Lithium battery pack was protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;
The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking.
The package must be handled with care and that a flammability hazard exists if the package is damaged.

The Lithium battery pack can be shipped by air in according to Section II/Section IB of PACKING INSTRUCTION 965 of the 2019 IATA Dangerous Goods regulations 61th Edition.

With regard to transport, the following regulations are cited and considered:
- The International Civil Aviation Organization (ICAO) Technical Instructions.
- The International Air transport Association (IATA) Dangerous Goods Regulations.
UN number of Lithium battery pack: UN3480 or UN3481;
UN Proper shipping name/Description (technical name): Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment;
UN Classification (Transport hazard class): Class 9 (PI965 Section IB) or N/A (PI965~967 Section II)

- The International Maritime Dangerous Goods (IMDG) Code.
UN number of Lithium battery pack: UN3480
UN Proper shipping name/Description (technical name): Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment;
UN Classification (Transport hazard class): N/A
Marine pollutant(Y/N): N
The battery is not restricted according to IMO IMDG Code (inc Amdt 39-18).
Need to meet the Special Provision: International maritime dangerous goods code (IMDG) 188, 230, 310, 348, 957;

Section 15 – Regulatory Information	
Regulatory Information	《Dangerous Goods Regulations》 《Recommendations on the Transport of Dangerous Goods Model Regulations》 《International Maritime Dangerous Goods》 《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 TitleⅢ(302/311/312/313) 》(SARA) 《Resource Conservation and Recovery Act》(RCRA) 《Safety Drinking Water Act》(CWA) 《California Proposition 65》 《Code of Federal Regulations》(CFR) In accordance with all Federal, State and local laws.

Section 16 – Additional Information	
Modify Description	The information above is believed to be accurate and represents the best information currently available to us. However, we makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export controlled information.

********** End of Report**********