

FICHE DE DONNEES DE SECURITE N°44

Référence produit

OTSK-20-000020

Désignation produit

Batterie soudeuse KOMSHINE

Fournisseur Version de la FDS

KOMSHINE -

Références fournisseur Date de dernière révision

FX37 01/01/2020

MATERIAL SAFETY DATA SHEET

File No.:MSDS-1RD1A/1

Issued: Jan 1st, 2020

Shenzhen Hengyu Energy Technology Co.,Ltd(SHET)

The lithium ion cells are exempt articles and are not subject to the OSHA Hazard Communication Standard Requirement. This sheet is provided as technical information only. The information and recommendations set forth are made in good faith and are believed to be accurate as of the date of preparation.

SLST makes no warranty, expressed or implied.

Section 1 - Product and Company Identification

Product Name: Lithium Ion Cell/Batteries Model Name: BT-81B 11.1V 6800mAh	TEL: (+86)-755-86006389
Manufacturer's Name: Shenzhen Hengyu Energy Technology Co., LTD	FAX: (+86)-755-26585593
Add: Block B3(H),Glory Technology Industrial Park,Baolong Road 5th,Longgang,Shenzhen,China	P.C: 518016

Section 2 – Composition / Information on Ingredients

Components	CAS#	Content (wt%)
Lithium Cobalt Dioxide (LiCoO2)	12190-79-3	less than 40wt%
Lithium Hexafluorophosphate (LiPF6)	21324-40-38	less than 3wt%
Polyvinylidene fluoride	24937-79-9	less than 5wt%
Carbonate Organic solvent	-	less than 15wt%
Graphite (C)	7782-42-5	less than 30wt%
Lead (Pb)*	7439-92-1	less than 0 1wt%(1000nnm)
Mercury (Hg)*	7439-97-6	less than 0 0005wt%(5nnm)

^{*:} Content information of banned or restricted material.

<u>Section 3 – Hazards Identification Including Emergency Overview</u>

A lithium ion cell is normally stable under appropriate handling and storage conditions. If a lithium ion cell generates abnormal heat, leave away from the cell to avoid inhaling internal-materials. Chemicals which are contained in lithium ion cells, have some toxicity and it may cause irritation.

Section 4 - First Aid Measures

First-aid method for different exposure routes:

Inhalation: Not anticipated. If battery is leaking, contents may be irritating to respiratory passages. Remove to fresh air. Contact physician if irritation persists.

Skin: Not anticipated. If battery is leaking, immediately flush skin with plenty of water for at least 15

minutes. If irritation, injury or pain persists, consults a physician.

Eye Contact: In case of contact with released electrolyte, immediately flush eyes with plenty of water for at least 15 minutes, and remove contaminated clothes and shoes. To avoid inhaling internal materials, leave area immediately. If irritation persists, consult a physician immediately.

Ingestion: Not anticipated. Consult a physician immediately for treatments.

The protection of first aiders Notes to physicians: If battery is leaking may extremely corrosive HF is produced upon combustion. Demand to use Ca-gluconate for first aid.

Section 5 - Fire Fighting Measures

Extinguishing Media: Plenty of water, Water fog spray, Dry chemical powder or Carbon dioxide. For incipient fires, carbon dioxide extinguishers are more effective than water.

Flammable Limits: N/A

Section 6 - Accidental Release Measures

Steps to be taken in case material is released or spilled:

Leave from contaminated area.

Near ignition source should be promptly removed.

Remove spilled electrolyte and batteries with absorbent not to contact with electrolyte. 放

Section 7 - Handling and Storage

Handling:

The risk of heat, fire, explosion:

- Do not dip or wet the cell or battery in water.
- Do not put the cell or battery into a fire or heat it. Do not solder the cell directly. Do not use or leave the cell or battery in a place near fire or heaters.
- Do not disassemble. Do not apply heavy impact to the cell or battery.
- Do not connect the cell or battery reversed in positive (+) and negative (-) terminals in the charger or equipment.
- Do not use any battery charger not specified by manufacturer, also, follow the charge conditions specified by manufacturer.
- Do not connect the battery directly to an electric outlet or cigarette heater socket in a car.

Storage:

• Store in cool place (preferably below 30℃/86℃) but prevent condensation on cells or batteries.

• Charge the battery every 6 months to the amount specified by the manufacturer, even if the battery is not used.

Section 8 - Exposure Controls, Personal Protection

Respiratory protection: Not necessary under normal use.

Hand protection: Not necessary under normal use. Eye protection: Not necessary under normal use. Skin protection: Not necessary under normal use.

Ventilation: Not necessary under normal use.

Other Protective Wear or Equipment: Not necessary under normal use.

Keep batteries away from small children.

Section 9 - Physical/Chemical Characteristics

Physical phase: Solid
Density (water=1): 1.5-2

 $Melting\ Point({}^{\circ}\mathbb{C}): LiCoO_2(about\ 1100{}^{\circ}\mathbb{C}),\ Polyvinylidene\ fluoride\ (38{}^{\circ}\mathbb{C}),\ Carbonate\ Organic\ solvent(<0)$

C)

Boiling Point($^{\circ}$ C): Polyvinylidene fluoride (240 $^{\circ}$ C), Carbonate Organic solvent(100-130 $^{\circ}$ C) Flash Point($^{\circ}$ C): Polyvinylidene fluoride (151 $^{\circ}$ C), Carbonate Organic solvent(21-33 $^{\circ}$ C)

Specific Gravity: LiCoO₂ (5g/cm³),

Graphite(2.1g/cm³) Appearance: LiCoO₂ and

Graphite are black powder.

Section 10 - Stability and Reactivity

Stability: Product is stable under storage conditions described in Section 7.

Conditions to avoid: Do not water, heat, crush, disassemble or short circuit.

Materials to avoid: Water, acid material.

Hazardous Decomposition or Byproducts: N/A

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Acute toxicity: None. Local effects: None.

Sensitization: None.

Chronic toxicity or long term toxicity: None.

Specific effects: None.

None internal materials are exposed.

In case of exposure, these cells contain some chemicals listed below

Components	ACGIH *3
Lithium Cobalt Dioxide (LiCoO ₂)	0.02 mg/m ³ as Co
Lithium Hexafluorophosphate (LiPF6)	$2.5 \text{ mg/m}^3 \text{ as F}$
Carbonate Organic solvent	Not Established
Polyvinylidene fluoride	Not Established
Graphite (C)	2 mg/m³ as dust

In case of internal gas released or electrolyte spilled: Electrolyte containing LiPF₆ and organic solvents has small toxicity and may cause irritation of skin or eyes. Released gas may also cause irritation of skin or eyes.

Section 12 - Ecological Information

Lithium ion cells and batteries can be disposable in accordance with appropriate federal, state and local regulations. However, we recommend recycling, since these cells and batteries contain recyclable material (LiCoO₂).

Section 13 - Disposal Consideration

Do not incinerate or subject cells and batteries to temperatures in excess of 100°C (212°F). Such handling may cause heat generation, explosion, or fire.

Section 14 - Transportation Information

IATA:

Proper Shipping Name:Lithium ion batteries packed with equipment/contained in equipment UN Number:UN3480/UN3481

The battery has passed the test items of UN model Regulations, Manual of Tests and Criteria, Part III, sub-section 38.3. According to IATA DGR 61st Edition, Packing Instruction 965, 966 or 967 Section I I is applied.

IMO:

Proper Shipping Name:Lithium ion batteries packed with equipment/contained in equipment UN number:UN3480/UN3481

The battery has passed the test items of UN model Regulations, Manual of Tests and Criteria, Part III, sub-section 38.3. The goods is not restricted to IMO IMDG Code (Amend 38-16) According to special provision 188.

Our products are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to all the applicable international and national governmental regulations, not limited to the above mentioned.

We further certify that the enclosed products have been tested and fulfilled the requirements and conditions in accordance with UN Recommendations (T1 – T8) on the Transport of Dangerous Goods Model Regulations and the Manual of Tests and Criteria that can be treated as "Non-Dangerous Goods".

The consignments for battery models **BT-81B**,have been packed in compliance with section II of Packing Instruction 965.

Section 15 - Regulatory Information

U.S. Regulations

National Inventory TSCA

All of the components are listed on the TSCA inventory.

SARA

To the best of our knowledge this product contains no toxic chemicals subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 372.

Regulatory information EU

Labeling

Hazardous components which must be listed on the label

As an article the product does not need to be labeled in accordance with EC directives or respective national laws.

0%

EU regulatory information

1999/13/EC (VOC):

Section 16 - Other Information

For further information, please contact a SLST sales representative.

Note:

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of SHET. It relates only to the specific material designated herein, and does not relate to use in combination with any other material or in any process. SHET assumes no legal responsibility for use of or reliance upon this information.