三帕认证

Material Safety Data Sheet

Product Name: **Li-ion Battery**

Model: WT 18650

Revision Date: Jan, 02，2019

Report No.: HT20190102MSDS43

Compiler: Peter Ye

Reviewer: Andy Li

Approver: Leo Zhi

Guangzhou CP-UP Certification Technology Service Co., Ltd.

Material Safety Data Sheet

SECTION 1 - CHEMICAL AND COMPANY IDENTIFICATION	
Name of Sample: Li-ion Battery	**Model and Ratings:** WT 18650 7.4V 5200mAh 38.48Wh
Company: Ningbo Huitong New Energy Technology Co., Ltd.	**Address:** Room 16-15/16-16, Block B, Building Liyuanshangdu, No39, Lane158, South Section, Huan Cheng West Road, Ningbo, China
Zip code: 315000	**Fax:** /
E-mail: yc403@nbip.net	**Emergency Telephone:** 0574-87681913

SECTION2 – HAZARDS IDENTIFICATION
Hazards Identification: The battery has passed the test items of UN Model Regulations, Manual of Test and Criteria Section UN38.3
Emergency Overview: Caution: Avoid contact and inhalation the electrolyte contained inside the battery.

SECTION3 – COMPOSITION/INFORMATION ON INGREDIENT		
Ingredient	**CAS No.**	**Concentration(%)**
Lithium Cobalt oxide	12190-79-3	37
Graphite	7782-42-5	20
Phosphate(1-), hexafluoro-,lithium	21324-40-3	18
Copper	7440-50-8	10
Aluminum	7429-90-5	6
PVC(Chloroethylene,polymer)	9002-86-2	3
PVDF	24937-79-9	5
Nickel	7440-02-0	1

SECTION 4 – FIRST AID MEASURES

Eye Exposure:

In case of contact with eyes, flush with copious of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Skin Exposure:

If the internal battery materials of an opened battery cell some into contact with skin, immediately flush with plenty of water.

Inhalation Exposure:

If inhaled the internals of battery vomiting. Seeking Immediate medical attention.

Ingestion Exposure:

If swallowed, do not induce vomiting. Seek immediate medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Danger characteristic:

Exposure to excessive heat can cause venting of the liquid electrolyte. Battery may burst and release hazardous decomposition products when exposed to a fire situation.

Hazardous combustion products:

Corrosive gas may be emitted during fire.

Fire-Fighting method& media

The stuff must equip with filtermask (full mask) or isolated breathing apparatus. The stuff must wear the clothes which can defense the fire in the upwind direction. Remove the container to the open space as soon as possible. Spray water on the containers in the fireplace to keep them cool until finish extinguishment Media: plenty of water, dry chemical powder or carbon dioxide .

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency treatment:

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the batteries to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate waste.

SECTION 7 – HANDLING AND STORAGE

Handling:

1. Do not allow battery terminates to contact each other, or contact with other metals.
2. 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.
3. Do not expose the battery to excessive physical shock or vibration.
4 Do not immerse, throw, and wet a battery in water.
5 Short-circuiting should be avoided. Short circuit will reduces the life of the battery and can lead to ignition of surrounding materials. Physical contact with to short- circuited battery can cause skin burn.
6. The batteries should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.
7. Place the cell beyond the child packing and container.

8. Do not connect the battery directly to an electric outlet or cigarette socket in a car.
9. Be sure to use the specified charger for battery, and follow the charging instructions correctly.
10. Do not mix old and new batteries together, neither with Ni-Cd, dry batteries or another manufacturer batteries or product.

Storage:

1. Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery stacks.
2. Keep the sample in the cool, dry and well-ventilated place(temperature:-20~30degree C humidity:45~85%). Do not exposure to direct sunlight for long periods. Keep away from fire and heating sources. Don't keep the samples with oxidizer and acid.
3. charge the battery every 6 months to the amount specified by the manufacture, even if the battery is not used.
4. Equip with relevant types and quantities of the extinguishment instruments. The storage place should be equipped with suitable shelter materials for divulgence handling.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Control:

Keep away from heat and open flame. Supply with sufficient partial air exhaust. Store in a cool, dry place.

Respiratory Protection:

Not necessary under conditions of normal use. Wear self-contained breathing filtermask if the density exceed in the air. Wear breathing apparatus under the condition of emergency rescue or evacuation.

Eyes Protection:

Not necessary under conditions of normal use. Wear protective glasses if handling a leaking or ruptured battery.

Skin and Body Protection:

Not necessary under conditions of normal use. Wear fireproofing, gas defense clothes in case of handling a leaking or ruptured battery.

Hands Protection:

Not necessary under conditions of normal use. Wear chemical resistant rubber .

Other Protections:

No smoking, dining and drinking water in the workplace. Keep good habit of hygiene.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Blue

Physical state:

Solid

Form:

Cylindrical

Odor:

Odorless

Solubility:

Insoluble in water.

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable under normal temperature and pressure.
Distribution of Ban: Strong oxidizer, strong acid and corrosives
Conditions to Avoid: Fire source, heating source, disassemble, external short circuit, crushes, deformation, high temperature above 100℃, direct sunlight and high humidity, immerse in water or overcharge.
Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: Metal oxides, CO, CO_2

SECTION 11 – TOXICOLOGICAL INFORMATION
Acute Toxicity: N/A
Sub-acute and Chronic Toxicity: N/A
Irritation Data: The internal battery materials may cause irritation to eyes and skin.
Sensitization: **Lithium transition metal oxidate-Li(M)m(O)n**: the nervous system of respiratory organs may be stimulated sensitively **Copper:** Sensitization of the skin may be caused by the long-term or repetitive contact.
Mutagenicity: No information is available.
Carcinogenicity: No information is available.
Others: Since the materials in this battery are sealed in the can, the potential for exposure to the components of the battery is negligible, when the battery is used as directed. However technical or electrical abuse of the battery mayresult in the release of battery contents.

SECTION 12 – ECOLOGICAL INFORMATION
Eco-toxicity: No data available.
Biodegradable: No data available.
Mobility in soil: No data available.
Bioconcentration or biological accumulation: No data available.
Other harmful effects: Don’t abandon the battery into environment, may cause water or soil pollution.

SECTION 13 - DISPOSAL CONSIDERATIONS

Appropriate Method of Substance:

The battery should be completely discharged prior to disposal in order to prevent short circuit. The battery contains recyclable materials. It is suggested recycle. Refer to National or Local regulations before handling. Disposal of the battery should be performed by permitted, professional disposal firms knowledgeable in National or Local regulations of hazardous waste treatment and hazardous waste transportation.

SECTION 14 – TRANSPORT 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 60th Edition, PACKING INSTRUCTION 965 ~ 967 of section II or IB for transportation.
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 provision188.

SECTION 15 – REGULATORY INFORMATION

US DOT:

Effective December 29,2004, the DOT requires that the outside of each package the contains primary lithium batteries, regardless of size of number of batteries, batteries, be labeled with the following statement:" PRIMARY LITHIUM BATTERIES-FOBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT", The labeling requirement covers shipments via highway, rail vessel or cargo-only aircraft and covers all shipment inside, into or out of the US. The label must be in contrasting color and the letters must be 12mm (0.5 in) in height for packages weighing more than 30Kg and 6mm (0.25 in) in height for packages weighting less than 30Kg.

SECTION 16 – ADDITIONAL INFORMATION

Date：

2018-09-30

Department：

Guangzhou CP-UP Certification Technology Service Co., Ltd.
No.1, Aigang 7th Lane, Yunxing Zhukeng Village, Shiqiao Street, Panyu District, Guangzhou City, China
Tel.: 0086-20-31127037
WEB: www.cp-up.com
Email: info@cp-up.com

Other Information:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make 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 investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damage of any third party or for last profits or any special, indirect, consequential or exemplary damages arising from using the above information.