No.SET2018-01269

Material Safety Data Sheet (MSDS) Report

Client unit: SINOWATT DONGGUAN LIMITED

Name of sample: Prismatic lithium-Ion Battery
Model: SW26650-50ME

Address: No. 7, Xingyuan Road, Yuquan Industrial Park, Fenggang Town, Dongguan, Guangdong, P.R. China

Tested By: Peter pan Checked By : Lu Jian Approved By : Billow

Date : Jan.24.2018 Date : Jan.24.2018 Date : Jan.24.2018

Query No. :BC7W947I

CCIC Southern Electronic Product Testing (Shenzhen) CO., Ltd.
Add: Electronic Testing Building, No. 43 Shahe Road, Xili Jiedao, Nanshan District, 518055 Shenzhen, Guangdong, China
http://www.ccic-set.com Tel：0755-86913585，26701907 Fax：0755-26701436

1 Identification of substance

Product details
Product name: Prismatic lithium-Ion Battery
Model No.: SW26650-50ME
Manufacturer/Supplier: SINOWATT DONGGUAN LIMITED
Address: No. 7, Xingyuan Road, Yuquan Industrial Park, Fenggang Town, Dongguan, Guangdong, P.R. China
Post Code: 523696
Telephone: 0769-82695120
Fax: 0769-89330788
Mail: xu.zhenhua@sinowatt.com
MSDS code: SET2018-01269

2 Hazards identification

This product as a whole, in general is safe under reasonably foreseeable use.
Primary routes of entry:
Eye: No known significant effects or critical hazards.
Skin: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Ingestion: May cause gastrointestinal irritation.

Health hazard: No known significant effects or critical hazards under normal use.

Environmental harm: No known significant effects or critical hazards.
Combustion hazard: The sample can burn.

3 Composition/Data on components

Chemical characterization:
Description : (CAS#)

Chemical composition	in % by weight	CAS No.	Molecular Formula
Carbon black	15～17	1333-86-4	C
Lithium Nickel Oxide	34～37	12031-65-1	$LiNiO_2$
Lithium Manganese Dioxide		12162-79-7	NA
Cobaltate, Lithium		12190-79-3	$CoLiO_2$

Chemical composition	in % by weight	CAS No.	Molecular Formula
Aluminum	19～21	7429-90-5	Al
1,3-Dioxolan-2-one -	3～4	96-49-1	$C_3H_4O_3$
Carbonic acid, ethyl methyl ester	3～4	623-53-0	$C_4H_8O_3$
Carbonic acid, dimethyl ester	3～4	616-38-6	$C_3H_6O_3$
polyethylene	2～3	9002-88-4	$(C_2H_4)_n$
Phosphate(1-), hexafluoro, lithium	1～3	21324-40-3	F_6LiP
Copper	7～8	7440-50-8	Cu
Iron	13～14	7439-89-6	Fe

Abbreviation ： CAS: Chemical Abstract Service.

4 First aid measures

Skin contact
Remove contaminated clothes and rinse the skin with plenty of water.
Eye contact
Not a health hazard. If enter the eye carelessly, No hazards under normal circumstances, if the product debris, dust into the eyes, lift the eyelid, use flowing water or normal saline to irrigate. Get medical treatment.
Inhalation
Debris, a lot of dust inhalation may cause respiratory discomfort, move to fresh air immediately rest. If uncomfortable situation failed to ease, get medical aid immediately.
Ingestion
If swallowed by mistake, obtain medical attention immediately.

5 Fire fighting measures

General Hazard:
The sample can burn.
Extinguishing Media: put out a fire in the surrounding environment with the right agent. Such as CO2, dry powder, water.
Fire precautions and measures: Firefighters must wear gas masks, wear firefighting suits.
Combustion products: No applicable.

6 Accidental release measures

Disposal methods:
1. Rapid evacuation leakage pollution area personnel to safe areas, and isolation, strictly limited access;
2. Provide adequate protection and ventilation equipment;
3. Cleaning the spillage with the method does not produce dust, collect the leakage in a suitable labeled container as much as possible;
4. In a safe condition, choose appropriate ways to prevent or reduce leakage, for example use sand or clay ring-fence leakage, possible cut off leakage source, avoid into sewer or other enclosed spaces;
5. Cut off the source of leakage as much as possible, avoid entering sewers or other confined space;
6. If a large number of leakage, collect and recycle leakage to suitable and indicative covered container, and shipped to a special waste disposal site disposal.

Waste treatment methods: All waste must be referring to the United Nations, national and local regulations for disposal.

7 Handling and storage

Handling: Job site should keep ventilation. Keep away from heat. Sealed container when not using. Reduce dust accumulation and generation. Equip with relevant types and quantities of the extinguishment instruments and devices for divulgence handling.

Storage: Stored in a low temperature, dry, well ventilated environment. Avoid direct sunlight. Store away from food and water, wash your hands thoroughly before eat bread or drink water. Far from taboo object, such as strong oxidizer, strong acid. Keep away from fire and heating sources. Equipped with corresponding varieties and number of fire equipment. Storage areas should be equipped with leakage emergency treatment equipment and suitable for accept materials.

8 Exposure controls and personal protection

Monitoring method: No data available.
Engineering controls: Ensure vapor concentration in the workshop under the requirements of existing OSHA.
Respiratory system safeguard: Exceed the standard concentration in air, must wear self-priming filter type gas mask (half mask), emergency rescue or evacuation, should wear air respirator.
Eye safeguard: If necessary, wear chemical safety protective glasses.
Body safeguard: Wear anti-static clothes.
Hand safeguard: Wear gloves.
Else safeguard: No smoking, dining and drinking water at job site. Avoid prolonged and repeated contact.

9 Physical and chemical properties:

General Information
9.1 General Information
Color: Green
9.2 Physical and chemical properties:
a) appearance and properties: Cylindrical
Odour: No odor.
b) pH value: no data available
c) melting point: no data available
d) the boiling point: no data available
e) relative density: no data available
f) relative vapour density: no data available
g) saturated vapor pressure: no data available
h) Octanol/water partition coefficient of value: no data available
i) solubility: Insoluble
9.3 Other information
Voltage: 3.7V
Electric Capacity: 5000mAh
Electric Energy: 18.5Wh

10 Stability and reactivity

10.1 stability
Stable under ordinary conditions of use and storage.
10.2 avoid contact conditions
Fire, high temperature.
10.3 prohibited content
Strong oxidizer, strong acid
10.4 aggregate harm
No data available
10.5 decomposition product
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

toxicology influencing information
Acute toxicity
No known significant effects or critical hazards.
Irritation
No known significant effects or critical hazards.
Chronic toxicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproduction toxicity

No known significant effects or critical hazards.

12 Ecological information

12.1 ecotoxicity

No known significant effects or critical hazards.

12.2 biological degradability

No known significant effects or critical hazards.

12.3 non-living things degradability

No known significant effects or critical hazards.

12.4 biology gathering and biology accumulate

No known significant effects or critical hazards.

13 Disposal considerations

All waste must be referring to the United Nations, national and local regulations for disposal, the dumped or discarded material may be regard as a restrictive waste referring to local regulations. Cleaned containers containing this substance were also required treatment. Comply with waste law. Atmospheric Pollution Act and water pollution law for disposal.

14 Transport information

Number of dangerous goods: 9

UN Number: UN3480

Packaging Mark: No data.

Packaging Method: No data.

The goods shall be complied with the Packing Instruction 965 section Ⅱ of 59th DGR Manual of IATA (2018 edition), including the passing of the UN38.3 test, And also complies with the Special Provision 188 and 230 of IMDG CODE (Amdt.38-16) 2017 Edition.

Check whether the container is full, sealing, to ensure that the container does not leak during the process of transportation, do not fall, no damage. It is strictly prohibited and oxidant, such as food chemicals during conventional. During transport, the vehicle should prevent exposure, rain and high temperature. For stopovers, the vehicle should be away from fire and heat sources. Transport vehicle must thorough cleaning and disinfection, or other items shall not be shipment. Shipping, equipped with position should be far away from the bedroom, kitchen, and from the engine room, power supply, fire and other parts. Highway transportation route as prescribed.

15 Regulations

OSHA Hazard communication standard (29 CFR 1910.1200)
Hazardous ___ Non-hazardous √__

Please note that waste disposal should meet local regulatory requirements.

16 Other information:

The above information are correct, but does not contain all of the information and only used as a guide. The information in this document is based on our current knowledge, it apply to this product as for the correct safety tips. The information does not guarantee the properties of this product. Our company is not responsible for any damages caused by the products.

****** END OF REPORT ******