

No:BW20200709

SAFETY DATA SHEET

Client unit: Suzhou Shengxu Electronics Co., Ltd.

Name of sample: Rechargeable Li-ion Battery

Address : 3F, Building 2, No.5488 Wuzhong Road, Xukou
Town, Wuzhong District, Suzhou, China

Tested by: Xugui

Checked By: Yaoyaping

Approvde By:
Chenyuanguang

Date: July. 07, 2020

Date: July. 09, 2020

Date: July. 09, 2020

1. Product and Company Information

Product name: Rechargeable Li-ion Battery

Model/Type reference: VCH2

Producer/Supplier: Suzhou Shengxu Electronics Co., Ltd.

Add:3F, Building 2, No.5488 Wuzhong Road, Xukou Town,
Wuzhong District, Suzhou, China

Date: July. 09, 2020

2. 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.

3. Component/Composition information

Material or ingredient	Chemical Formula	CAS No.	Wt%
Electrolyte solvent	Includes one or more of the following: Ethylene Carbonate/C ₃ H ₄ O ₃ //Propylene Carbonate/C ₄ H ₆ O ₃ //Diethyl Carbonate/C ₅ H ₁₀ O ₃ //Ethyl propionate/C ₅ H ₁₀ O ₂	96-49-1/108-32-7/105-58-8/10537-3	5-20%
Lithium cobalt oxide	LiCoO ₂	12190-79-3	20-50%
Polyvinylidene Fluoride (PVDF)	(CH ₂ CF ₂) _n	24937-79-9	<1%
Graphite	C	7782-42-5	10-30%
Lithium Hexafluorophosphate	LiPF ₆	21324-40-3	0.05-5%
Aluminium (Al)	Al	7429-90-5	2-10%
Copper (Cu)	Cu	7440-50-8	3-15%

4. First Aid Measures

Eye: In case of the internal battery materials in contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Skin: Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

Inhalation: If inhaled the internal materials of battery,remove immediately to fresh air and seek medical attention.

Ingestion: If swallowed the internal materials of battery,do not induce vomiting.Seek immediate medical attention.

5. Fire Fighting Measures

Flash Point: N/A.

Auto-Ignition Temperature: N/A.

Extinguishing Media: Dry chemical,sandy soil, Carbon dioxide or appropriate foam.

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific hazards: Emit toxic fumes under fire conditions.

6. Accidental Release Measures

Steps to be taken in case Material is Released or Spilled

If the battery material is released,remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth,and dispose of it in a plastic bag and put into a steel can.The preferred response is to leave the area and allow the battery to cool and vapors to dissipate.Avoid skin and eye contact or inhalation of vapors.Remove spilled liquid with absorbent and incinerate.

Waste Disposal Method

It is recommended to discharge the battery to the end,to use up the metal lithium inside the battery,and to bury the discharged battery in soil.

7. Handling and Storage

Handling

Keep away from ignition sources, heat and flame. 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. No smoking at working site.

Materials to Avoid:strong oxidizing agents,Corrosives.

Storage

Store in a cool,well-ventilated area. Keep away from ignition sources,heat and flame.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.

Other Precautions

The battery may explode or cause burns,if disassembled,crushed or exposed to fire or high temperatures.Do not short or install with incorrect polarity.

8. Exposure Controls / Personal Protection

Engineering controls

Use ventilation equipment if available. Safety shower and eye bath.

Personal Protection

Respiratory system: Not necessary under conditions of normal use.

Eyes: Not necessary under conditions of normal use.

Clothing: Wear appropriate protective clothing.

Hand: Safety gloves.

9. Physical and Chemical Properties

State	Solid
Odor	N/A
PH	N/A
Boiling point	N/A
Solubility in water	Insoluble
Specific gravity	N/A
Density	N/A
Nominal Voltage	7.2V
Rate Energy	14.4Wh

10. Stability and Reactivity

Reactivity

None

Incompatibilities

None during normal operation. Avoid exposure to heat, open flame, and corrosives.

Hazardous Decomposition Products

None during normal operating conditions. If cells are opened, hydrogen fluoride and carbon monoxide may be released.

Conditions To Avoid

Avoid exposure to heat and open flame. Do not puncture, crush or incinerate.

11. Toxicological Information

This product does not elicit toxicological properties during routine handling and use.

Toxicity Data: Not available.

Irritation Data: The internal battery materials may cause irritation to eyes and skin.

12. Ecological Information

Mammalian effects: None known present.

Eco-toxicity: None known present.

Environmental fate: None known environmental hazards present.

13. Disposal Considerations

Do not incinerate, or subject cells to temperature in excess of 70°C, Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.

14. Transport Information

14.1 UN Number: 3480

14.2 UN Proper shipping name: LITHIUM ION BATTERIES

14.3 Transport Hazard class: 9

14.4 Packing group: II

14.5 Special provisions: 188, 230, 384

14.6 Packing instructions: P903

14.7 Environmental hazards: No

14.8 Special precautions for user

In case of fire: F-A

In case of leakage: S-I

14.9 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Available

14.10 IATA Transport: the 61th edition of the IATA of Dangerous Goods Regulations PI 965-Section IB

Hazard Classification:

The goods shall be complied with the requirements of section IB of Packing Instructions 965 and section II of Packing Instructions 966 or 967 of 60th DGR.

Manual of IATA (2019 edition) or special provision 188 of IMDG CODE (Amdt. 38-16) 2018 Edition, including the passing of the UN38.3 test.

15. Regulatory Information

Law 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》

《Toxic Substance Control Act》（TSCA）

In accordance with all Federal, State and local laws.

16. Other Information

The above information are correct, but does not contain all of the information and only used as a guide. Users should read this file carefully, and use the batteries in correct method. Our company doesn't assume responsibility for any damage or loss because of misuse of batteries.