



新普科技股份有限公司  
新世電子(常熟)有限公司  
新普科技(重慶)有限公司  
華普電子(常熟)有限公司  
Simple Technology Co., Ltd.  
Simple Technology(Changshu)Inc.  
Simple Technology(Chongqing)Inc.  
Huapu Technology(Changshu)Inc.

# MATERIAL SAFETY DATA SHEET

Issued/Revised date : November 08 2018

Document No. : AC-181108001

## 1. Product and Company Identification

Product Identification :

Lithium-Ion Rechargeable Battery Pack/4S1P

Model Name: AP18E7M

Customer P/N : KT.00407.007

Simple P/N : 934QA013H/ 934QA013HB

Rating: 15.4V---TYP 3815mAh/58.75wh

MIN 3720mAh/57.28wh

Manufacturer :

Simple Technology Co., Ltd.

No.471, Sec.2, Pa Teh Rd., Hu Kou 303, Hsin Chu Hsien, Taiwan

Tel : +886-3-5695920

Fax : +886-3-5695931

Simple Technology (CHANGSHU) INC.

No.2 DongNan Avenue, ChangShu, JiangSu Province , China

Tel : +86-0512-52302255

Fax : +86- 0512-52302277

Simple Technology (CHONGQING) INC

NO.2 Zongbao Avenue, Shapingba District, Chongqing, China

Tel : 023-61718899 Fax : 023-61710488

Huapu Technology(Changshu) Inc.

No.2 DongNan Avenue, ChangShu, JiangSu Province , China

Tel : +86-0512-52302255

Fax : +86- 0512-52302277

## 2. Hazards Identification

The product is not classified for GHS. The batteries are defined as "articles" they are exempt from the requirements of the Hazard Communication Standard.

Primary routes of entry : Skin contact, Skin absorption; Eye contact, Inhalation and ingestion: No

Symptoms of exposure : Skin contact, No effect under routine handling and use.

Skin absorption : No effect under routine handling and use.

Eye contact : No effect under routine handling and use.

Inhalation : No effect under routine handling and use.

Reported as carcinogen : Not applicable

According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) this product is not classified as hazardous.

## 3. Composition / Identification on Ingredients

Substance : Lithium Ion Battery

Composition :

CAS Number: Not specified (3-1 and 3-2)



新普科技股份有限公司  
新世電子(常熟)有限公司  
新普科技(重慶)有限公司  
華普電子(常熟)有限公司  
Simple Technology Co., Ltd.  
Simple Technology(Changshu)Inc.  
Simple Technology(Chongqing)Inc.  
Huapu Technology(Changshu)Inc.

- 3-1. Cases: Plastic Material Not dangerous  
3-2. Printed Circuit Board Assembly Not dangerous  
3-3. Lithium Ion Cell :

Hazardous Ingredients	%	CAS Number
Graphite	7-25	7782-42-5
Lithium Cobalt Oxide	15~40	12190-79-3
Hexafluoropropylene-vinylidene fluoride Copolymer	3~15	9011-17-0
Lithium Hexafluorophosphate	0~5	21324-40-3
Acetylene Black	0-2	1333-86-4
Diethyl Carbonate	0-15	105-58-8
Dimethyl Carbonate	0-15	616-38-6
Ethyl Methyl Carbonate	0-15	623-53-0
Propylene Carbonate	0-15	108-32-7
Ethylene Carbonate	0-15	96-49-1

#### 4. First Aid Measures

- Inhalation : Make the victim blow his/her nose, gargle. Seek medical attention if necessary.  
Skin contact : Remove contaminated clothes and shoes immediately. Wash extraneous matter or contact region with soap and plenty of water immediately.  
Eye contact : Do not rub one's eyes. Immediately flush eyes with water continuously for at least 15 minutes. Seek medical attention immediately.  
Ingestion : Make the victim vomit. When it is impossible or the feeling is not well after vomiting, seek medical attention.

#### 5. Fire Fighting Measures

- Extinguishing Media : Use suitable extinguishing media.  
Firefighting Equipment : Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full protective gear.

#### 6. Accidental Release Measures

- On Land : Place material into suitable containers and call local fire/police department.  
In Water : If possible, Remove from water and call local fire/police department.

#### 7. Handling and Storage

##### Handling :

Do not expose the battery to excessive physical shock or vibration. Short-circuiting should be avoided. However, accidental short-circuiting for a few seconds will not seriously affect the battery. Prolonged short circuits will cause the battery to rapidly lose energy, could generate enough heat to burn skin. Sources of short circuits include jumbled batteries in bulk containers, coins, metal jewelry, metal covered tables, or metal belts used for assembly of batteries in devices. To minimize risk of short-circuiting, the protective case supplied with the battery should be used to cover the terminals when transporting or storing the battery. Do not disassemble or deform the battery. Should an individual cell within a battery become ruptured, do not allow contact with water.



新普科技股份有限公司  
新世電子(常熟)有限公司  
新普科技(重慶)有限公司  
華普電子(常熟)有限公司  
Simple Technology Co., Ltd.  
Simple Technology(Changshu)Inc.  
Simple Technology(Chongqing)Inc.  
Huapu Technology(Changshu)Inc.

**Storage :**

The lithium ion battery should be between 25% and 75% of full charge when stored for a long period of time. Store in a cool, dry, well ventilated area. And temperature above 100 Celsius degree can result in loss of battery performance, leakage, or rust. Do not expose the battery to open flames..

## **8. Exposure Controls / Personal Protection**

Engineering Controls : Keep away from heat and open flame. Store in a cool dry place

Personal Protection :

Respirator : Not required during normal operations. SCBA required in the event of a fire.

Eye/Face Protection : Not required beyond safety practices of employer.

Gloves : Not required for handling of battery.

Foot Protection : Steel toed shoes recommended for large container handling.

## **9. Physical and Chemical Properties**

State	Solid
Odor	N/A
PH	N/A
Vapor pressure	N/A
Vapor density	N/A
Boiling point	N/A
Solubility in water	Insoluble
Specific gravity	N/A
Density	N/A

## **10. Stability and Reactivity**

Reactivity : None

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

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.

## **12. Ecological Information**

Lithium ion battery pack can be disposable in accordance with appropriate federal, state and local regulations.

## **13. Disposal Consideration**

Recommended methods for safe and environmentally preferred disposal:

Product(waste from residues)

Do not throw out a used battery cell. Recycle it through the recycling company.

Contaminated packaging

Neither a container nor packing is contaminated during normal use. When internal materials leaked from a battery cell contaminates, dispose as industrial wastes subject to special control.



新普科技股份有限公司  
新世電子(常熟)有限公司  
新普科技(重慶)有限公司  
華普電子(常熟)有限公司  
Simple Technology Co., Ltd.  
Simple Technology (Changshu) Inc.  
Simple Technology (Chongqing) Inc.  
Huapu Technology (Changshu) Inc.

## 14. Transport Information

Lithium ion batteries containing no more than 1.5g/cell and 8g/battery pack and also power is no more than 20Wh/cell and 100Wh/battery pack of lithium can be treated as "Non-dangerous goods" under the United Nations Recommendations on the Transport of Dangerous Goods, Special Provision 188, provided that packaging is strong and prevent the products from short-circuit.

With regard to air transport, the following regulations are cited and considered:

- \* The International Civil Aviation Organization (ICAO) Technical instructions (2017-2018 Edition)
- \* The International Air Transport Association (IATA) Dangerous Goods Regulations (59th Edition, 2018) Special Provisions A154, A164 & package instruction Section II of 965, 966 and 967 for lithium ion batteries, or package instruction Section IB of 965.
- \* The International Maritime Dangerous Goods (IMDG) Code (2016 Edition), Special Provision 188.
- \* The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA (Part 49 CFR Sections 100-185)
- \* The Office of Hazardous Materials Safety with the US Department of Transportation's (DOT) Research and Special Programs Administration (RSPA), and
- \* The UN Recommendations on the Transport of Dangerous Goods Model Regulations and the Manual of Tests and Criteria

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 38.3 (T1 – T8) on the Transport of Dangerous Goods Model Regulations and the Manual of Tests and Criteria, that can be as "Non-hazardous Goods."

Lithium ion batteries only transport by air in accordance with PI965 at a state of charge (SOC) not to exceed 30 percent of rated design capacity.

### Test results of the UN Recommendation on the Transport of Dangerous Goods

Manual of Test and Criteria (38.3 Lithium battery)		Test Results	Remark
No	Test item		
T1	Altitude Simulation	Pass	
T2	Thermal Test	Pass	
T3	Vibration	Pass	
T4	Shock	Pass	
T5	External Short Circuit	Pass	
T6	Impact/Crush	Pass	
T7	Overcharge	Pass	
T8	Forced Discharge	Pass	

## 15. Regulatory Information

Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.5)

OSHA Hazard communication standard (29 CFR 1910.1200)

\_\_\_\_\_ Hazardous                        V   Non-hazardous

## 16. Other Information

The information contained herein is furnished without warranty of any kind. Users should consider this data only as a supplement to other information gathered by them and must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.