



材料安全数据表 Material Safety Data Sheet

货 物 名 称: 聚合物锂离子电池

Name of Goods: Polymer Li-ion Battery

委 托 单 位: 东莞山锂电池科技有限公司

Commissioner: Dongguan Sunly Battery Technology CO., LTD

东莞市联鼎电子科技有限公司 Dongguan UTL Electronic Technology Co., Ltd.

ftil-It'41AVM Material Safety Data Sheet

1. Identification of the product and supplier (?Nagli ⁻ FC ⁻ 4,ft)		
tfrfliV41 Name of goods	WI; ¹ -1P1110; 1' itOth Polymer Li-ion Battery	
if PuM·9· Type/Mode	SL453245	
Al* Ratings	3.7V, 700mAh, 2.59Wh	
* ffi *ft Commissioned by	*M IIJ VP Fhitl\$1-11Cri lkit-il . Dongguan Sunly Battery Technology CO., LTD	
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MIN M anufacturer	Z WV!. Cit,4¹1-flaT IR ./z;n] Dongguan Sunly Battery Technology CO., LTD	
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SZittig Inspection according to	EEC Directive 93/112/EC ICI- Fil (A7=IM·81·14miizt.sa.rita -ri;)) UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS"	
RtIRA Ftit Emergency telephone call	+86-769 87285025	
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Approved by:

Reviewed by:

Tested by:

批准

审核: 美

Report No.: 16PNS09052 01001

2. Composition/Information on Ingredient (成分/组成信息)			
危险成分 (化学名称) Hazardous Ingredients (Chemical Name)	含量及含量百分比(%) Concentration or concentration ranges (%)	CAS编号 CAS Number	
钴酸锂/ Lithium Cobalt Oxide	39.8	12190-79-3	
聚偏氟乙烯/ Polyvinylidene Fluoride(PVDF)	0.6	24937-79-9	
铝/ Aluminium(Al)	5.9	7429-90-5	
石墨/ Graphite	20.3	7782-42-5	
丁苯橡胶/ Styrene-Butadiene Rubber (SBR)	1.1	61789-96-6	
羧甲基纤维素/ Carboxymethylcellulose	0.3	9000-11-7	
铜/ Copper (Cu)	10.9	7440-50-8	
镍/ Nickel (Ni)	0.6	7440-02-0	
六氟磷酸锂/ Lithium Hexafluorophosphate	20.5	21324-40-3	

3. Hazards Identification (主要危险性鉴定)		
爆炸危险性	该物品不属于爆炸危险品	
Explosive risk	This article does not belong to the explosion dangerous goods	
易燃危险性	该物品不属于易燃危险品	
Flammable risk	This article does not belong to the flammable material	
氧化危险性	该物品不属于氧化危险品	
Oxidation risk	This article does not belong to the oxidation of dangerous goods	
毒害危险性	该物品不属于毒害危险品 This article does not belong to the toxic dangerous goods	
成 彩尼 性	该物品不属于放射危险品	
Radioactive risk	This article does not belong to the radiation of dangerous goods	
腐蚀危险性	该物品不属于腐蚀危险品	
Mordant risk	This article does not belong to the corrosion of dangerous goods	
其他危险性	该物品为聚合物锂离子电池,瓦时率为2.59Wh	
other risk	This article is Polymer Li-ion Battery, Watt hour rate 2.59Wh	

Page 4 of 7 Report No.: 16PNS09052 01001

4. First aid measures (gfidri

Eye

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin

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

Inhalation

Remove from exposure and move to fresh air immediately. Use oxygen if available.

Ingestion

Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

5. Fire-fighting measures OM%

Flash Point: N/A.

Auto-Ignition Temperature: N/A.
Extinguishing Media: Water, CO2.
Special Fire-Fighting Procedures
Self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

Cell may vent when subjected to excessive heat-exposing battery contents.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide, lithium oxide fumes.

6. Accidental release measures (ffigitkA)

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. Provide maximum ventilation. 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.

Page 5 of 7 Report No.: 16PNS09052 01001

7. Handling and storage (WfirAENtilM4)

The battery 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.

Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire.

Do not crush or puncture the battery, or immerse in liquids.

Precautions to be taken in handling and storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

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 (40tWOJ/tAigfl)

Respiratory Protection

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

Ventilation

Not necessary under conditions of normal use.

Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

Personal Protection is recommended for venting battery

Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

9. Physical and chemical properties (001flllt**lt)

Appearance: Prismatic shape

Ref. No.: N/A

Odour: If leaking, smells of medical ether.

pH: Not applicable as supplied.

Flash Point: Not applicable unless individual components exposed.

Flammability: Not applicable unless individual components exposed.

Relative density: Not applicable unless individual components exposed.

Solubility (water): Not applicable unless individual components exposed.

Solubility (other): Not applicable unless individual components exposed.

Page 6 of 7 Report No.: 16PNS09052 01001

10. Stability and reactivity (tavt*ii&ad-4-itt)

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

Conditions to avoid: Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble.

Overcharge. Short circuit. Expose over a long period to humid conditions.

Materials to avoid: Oxidising agents, alkalis, water.

Hazardous Decomposition Products: Toxic Fumes, and may form peroxides.

Hazardous Polymerization: N/A.

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

11. Toxicological information (RitM4)

Signs & symptoms: None, unless battery ruptures.

In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

Inhalation: Lung irritant.

Skin contact: Skin irritant

Eye contact: Eye irritant

Ingestion: Poisoning if swallowed

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to server irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

12. Ecological information (t*Pt)

Mammalian effects: None known at present.

Eco-toxicity: None known at present.

Bioaccumulation potential: Slowly Bio-degradable.

Environmental fate: None known environmental hazards at present.

13. Disposal consideration (11P:kR)

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 (30V,tk)

Label for conveyance: Lithium Battery Label.

UN Number: UN3480 or UN3481

Dongguan UTL Electronic Technology Co., Ltd.

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Page 7 of 7 Report No.: 16PNS09052 01001

Packing Group: N/A EmS No: F-A, S-1 Marine pollutant: No

Proper Shipping name: 1) Lithium ion batteries; 2) Lithium ion batteries packed with equipment; 3) Lithium ion batteries contained in equipment. (including Lithium ion polymer batteries)

Hazard Classification: The goods shall be complied with the requirements of Section II (or Section IB) of Packing Instructions 965-967 of 57th DGR Manual of IATA (2016 edition), including the passing of the UN38.3 test. And also complies with the Special Provision 188 of IMDG CODE (Amdt.37-14) 2014 Edition.

15. Regulation information (MAMA)

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))
((Occupational Safety and Health Act)) (OSHA)
((Toxic Substance Control Act)) (TSCA)
((Consumer Product Safety Act)) (CPSA)
((Federal Environmental Pollution Control Act)) (FEPCA)
((The Oil Pollution Act)) (OPA)
(Superfund Amendments and Reauthorization Act Tit101 (302/311/312/313))) (SARA)
((Resource Conservation and Recovery Act)) (RCRA)
((Safety Drinking Water Act)) (CWA)

16. Other information (itiittl)13

This information is not effective to all the batteries manufactured by Dongguan Sunly Battery Technology CO., LTD. This information comes from reliable sources, but no warranty is made to the completeness and accuracy of information contained. Dongguan UTL Electronic Technology Co., Ltd. doesn't assume responsibility for any damage or loss because of misuse of batteries. User's should grasp the correct use method and be responsible for the use of batteries.

((Code of Federal Regulations)) (CFR)

In accordance with all Federal, State and local laws.