

Material Safety Data Sheet (MSDS)

Product picture and name:



T1



T1 RHTP

EN: This material safety data sheet refers to the batteries included in **all Trusted data trackers/loggers in the 1-series***. Standard products are pictured.

Trusted A/S declares that these products contain **Li-SoCi₂** battery packs as documented on the following pages.

DE: Dieses Sicherheitsdatenblatt bezieht sich auf die Batterien, die in **allen Trusted Datenloggern/Trackern der 1er-Serie*** enthalten sind. Standardprodukte sind abgebildet.

Trusted A/S erklärt, dass diese Produkte **Li-SoCi₂** enthalten Akkupacks, wie auf den folgenden Seiten dokumentiert.

FR: Cette fiche de données de sécurité fait référence aux batteries incluses dans tous **les enregistreurs de données/traqueurs Trusted de la série 1***. Les produits standard sont illustrés.

Trusted A/S déclare que ces produits contiennent **Li-SoCi₂** batteries comme documenté dans les pages suivantes.

ES: Esta hoja de datos de seguridad del material se refiere a las baterías incluidas en **todos los registradores/rastreadores de datos Trusted de la serie 1***. Los productos estándar se muestran en la imagen.

Trusted A/S declara que estos productos contienen **Li-SoCi₂** baterías como se documenta en las siguientes páginas.

IT: Questa scheda di sicurezza dei materiali si riferisce alle batterie incluse in **tutti i data logger/tracker Trusted della serie 1***. I prodotti standard sono illustrati.

Trusted A/S dichiara che questi prodotti contengono **Li-SoCi₂** batterie come documentato nelle pagine seguenti.

PT: Esta ficha de dados de segurança do material refere-se às baterias incluídas em **todos os registradores/rastreadores de dados Trusted da série 1***. Os produtos padrão são retratados.

Trusted A/S declara que estes produtos contêm **Li-SoCi₂** baterias conforme documentado nas páginas a seguir.

Table of contents:

- Material Safety Data Sheet, TUV-Laboratory (China)
- UN38.3 Summary ER14505M, Guangzhou MCM Certification Testing Co.,Ltd.
- Specification FANSO ER14505M, Wuhan Fanso Technologies Co.,Ltd.

* All other relevant editions are marked with "Type: T1.xxx" on the label



WUHAN FANSO TECHNOLOGY CO., LTD.

According to UN GHS (the 8th revised edition)

Material Safety Data Sheet (MSDS)

Product Name:	Li-SoCl ₂ Battery
Model No.:	/

Written by: Linda
(Linda)

Inspected by: Jose
(Jose)



ISSUED BY: TUV-Laboratory (China) Service of Testing Co., Ltd.

Jan. 2022 PRINT

Item No.:	20A028A307
MSDS No.:	E27.210.111.004.WFT-2
Initial Date:	Jan. 11, 2021
Revision Date:	Jan. 14, 2022



Material Safety Data Sheet

Product Name: Li-SoCl₂ Battery

Initial Date: Jan. 11, 2021

Version: 2.0

MSDS No.: E27.210.111.004.WFT-2

Revision Date: Jan. 14, 2022

Item No.: 20A028A307

Section 1

Product and Company Identification

Product identification

Product Name:	Li-SoCl ₂ Battery
Model No.:	/
Trademark:	FANSO
CAS No.:	Not applicable
EC No.:	Not applicable
Molecular formula:	Not applicable

Relevant identified uses of the substance or mixture and uses advised against

Identified uses:	Used for electronic instrument
Uses advised against:	No special note

Details of the applicant, supplier

Company name:	WUHAN FANSO TECHNOLOGY CO., LTD.
Address:	1 Sitai Wu Lu, Sitai Industrial Park, Yongfeng Street, Hanyang District, Wuhan
Post code:	/
Telephone:	+86-18627884463
Fax:	/
E-mail:	/

Emergency telephone number

Emergency telephone:	+86-19947659915
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Section 2

Hazard Description

1

For the battery, chemical materials are stored in a hermetically sealed case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use, there is no physical danger of ignition or explosion and chemical danger. However, do not open, short-circuit, squeeze, burn, disassemble, expose to flame, mix different models, different chemical properties or different types of batteries. The battery case will be breached at the extreme, hazardous materials may be released.

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TUV-Laboratory (China) Service of Testing Co., Ltd.
3F, E Block, Huijiao Building, Fuyong, Bao'an Dist, Shenzhen

Website: www.tuv-lab.com
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Fax: 0755-3295 7866



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Hazard description

Physical and chemical hazards

Non-flammable, no special explosive characteristics.

Health hazards

Inhalation: The steam of the electrolyte has an anesthesia action and stimulates a respiratory tract.

Ingestion: Abdominal pain, vomiting.

Skin contact: The steam of the electrolyte stimulates a skin. The electrolyte skin contact causes a sore and stimulation on the skin.

Eye contact: The steam of the electrolyte stimulates eyes. The electrolyte eye contact causes a sore and stimulation on the eye. Especially, substance that causes a strong inflammation of the eyes is contained.

Environmental hazards

Please refer to Section 12 of MSDS.

Section 3

Composition/Ingredient Data

Material

Mixture

Component(s)	Content, %	CAS No.
Thionyl Chloride	40.0-45.0	7719-09-7
Litium	4.5-5.5	7439-93-2
Carbon	3.0-4.0	7782-42-5
Aluminum Chloride	1.0-5.0	7446-70-0
Tetrafluoroethylene	0.02	9002-84-0

Section 4

First Aid Measures

Description of first aid measures

General advice: Show this material safety data sheet to the doctor in attendance.
After receiving the first-aid measure required, consult a physician if necessary.

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Skin contact:	Remove contaminated clothing and shoes. Wash off with mild soap and plenty of water. If skin irritation occurs or persists, consult a physician immediately.
Eyes contact:	Check for and remove any contact lenses, occasionally lifting the upper and lower eyelids. Immediately flush eyes with running water, disappear until the chemical residues so far. Provide a readily-accessible eyewash facility and quick-drench safety shower. Do not rubbing eyes with hand. If eye irritation occurs or persists, consult a physician immediately.
Inhalation:	Move exposed person to fresh air. Maintain an open airway. Keep person warm and at rest. If breathing is irregular, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe.
Ingestion:	Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

Most important acute and delayed symptoms/effects

1	The most important known symptoms and effects are described in section 2 and/or in section 11.
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Immediate/special treatment

1	Continue with first aid measures. Treat symptomatically and supportively.
2	Symptoms may be delayed.

Section 5

Firefighting Measures

Extinguishing agent

Suitable/Unsuitable extinguishing agents:	In case of fire, water flooded ground fire. If the battery is burning, water may not be extinguished, but can use water cooling adjacent batteries so as to control
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the spread of fire. The preferred medium for small fire is carbon dioxide, dry powder, or foam extinguishing agent, but for the lithium battery is burning may be no use, the battery will burn until complete combustion. In fact, all lithium batteries can be controlled by water. However, when using water to produce hydrogen gas may be mixed with air to form explosive mixture. LITH-X (graphite powder) or copper powder fire extinguishers, sand, dry, powdered dolomite or soda can be used as smothering agent

Special hazards arising from the substance or mixture

- | | |
|---|---|
| 1 | If this product is involved in a fire, the following can be released: Carbon oxides, metal oxides, etc. |
|---|---|

Fire precautions and measures

- | | |
|---|--|
| 1 | Firefighters must wear self-contained breathing apparatus, wear full body fire suit, fire extinguishing in the upwind. |
| 2 | As far as possible will be transferred to empty containers from the scene. |
| 3 | Keep the fire water spray containers cooling, until the end of fire. |
| 4 | If the containers in the fire ground have been color, must be evacuated immediately. |
| 5 | Isolated accident scene, prohibit access. |
| 6 | Receiving and processing of fire, to prevent environmental pollution. |

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- | | |
|---|---|
| 1 | No action shall be taken involving any personal risk or without suitable training. |
| 2 | Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. |
| 3 | Do not touch or walk through spilt material, avoid slipping. |
| 4 | Avoid breathing steam. |
| 5 | Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. |
| 6 | Put on appropriate personal protective equipment (see section 8). |

Environmental precautions

- | | |
|---|---|
| 1 | Prevent further leakage or spillage if safe to do so. |
| 2 | Discharge into the environment must be avoided. |

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Methods and materials for containment and cleaning up

1	Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth.
2	Contaminated absorbent material may pose the same hazard as the spilt product.
3	Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Section 7 Handling and Storage

Precautions for safe handling

1	Don't uses or leave the battery near a heat source as fire or heater.
2	If the battery gives off an odor, generates heat, becomes discolored or deformed, or in any way appear abnormal during use or storage, immediately remove it from the device and stop using.
3	Don't put the battery excessive vibration, avoid short circuit, however accidental short circuit for a short period of time will not have a serious impact on the battery.
4	Long-term short circuit can make battery loss of energy, generate a lot of heat burn skin, and even cause a fire or explosion.
5	Chaos of the battery in bulk in containers, coins, metal accessories, metal workbench, covered by or metal belt and so on battery device can be used for assembly is the source of cause a short-circuit.
6	Transport or storage battery should have effective measures of prevent short circuit.
7	Don't disassembly or damage to the battery.
8	Keep away from heat/sparks/open flames/hot surfaces.
9	Handling carefully to prevent damage the packaging and container.
10	Equipped with corresponding varieties and number of fire equipment and spill contingency processing equipment.

Precautions for storage

1	Stored in a cool, dry and ventilated place, may cause the battery performance loss under high temperature, leakage, rust.
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2	Don't expose the battery under the open flame, stored away from water and strong oxidizing agent.
3	Equipped with corresponding varieties and number of fire equipment and spill contingency processing equipment.
4	Keep out of reach of children and pets.

Section 8 Exposure Controls/Personal Protection

Control parameters


Occupational Exposure limit values

Components CAS No.	Country/region	Occupational exposure limits (8h)		Occupational exposure limits (Short time)	
		ppm	mg/m ³	ppm	mg/m ³
Thionyl Chloride 7719-09-7	USA-NIOSH	-	-	1	5
	Korea	-	-	0.2	1
	New Zealand	-	-	1	4.9
	Ireland	-	-	0.5	2.4
	Denmark	1	5	1	5
	Australia	-	-	1	4.9

Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

General requirements:	
Respiratory protection:	Respiratory protective equipment is not necessary if used as intended. Respiratory protection may be required under exceptional circumstances when excessive air contamination exists. If the batteries leaks must try to keep the air circulation, avoid operating in a narrow place.
Eye protection:	Not necessary if used as intended, wear goggles/safety glasses giving complete eye protection if the battery damaged or leaking.

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Skin and body protection:	Not necessary if used as intended, wear appropriate clothing and boots to minimize skin exposure if the battery damaged or leaking.
Hands protection:	<p>Not necessary if used as intended, wear appropriate protective gloves if the battery damaged or leaking.</p> <p>Check protective gloves prior to each use for their proper condition.</p> <p>The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.</p>

Section 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance and character:	Red/white column shape, solid
Odor:	Odorless
Flash point (°C):	No data/Not applicable
Melting point/freezing point (°C):	No data/Not applicable
Initial boiling point and boiling range (°C):	No data/Not applicable
Evaporation rate:	No data/Not applicable
Steam pressure (20°C):	No data/Not applicable
Relative density (water=1):	No data/Not applicable
Partition coefficient: n-octanol/water:	No data/Not applicable
Decomposition temperature (°C):	No data/Not applicable
pH value:	No data/Not applicable
Auto ignition temperature (°C):	No data/Not applicable
Explosion limit [% (v/v)]:	Non explosives
Relative vapor density (air=1):	No data/Not applicable

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Solubility:	Insoluble in water
Flammability (solid, gas):	Non-flammable
Oxidizing properties:	The substance does not belong to oxidizing substances

Section 10 Stability and Reactivity

Stability and Reactivity

Stability:	The product is chemically stable.
Reactivity:	Stable under recommended storage and handling conditions.
Incompatible materials:	Strong oxidizing agents, strong acids and strong bases.
Conditions to avoid:	In contrast to the nature of the material, overheating, exposed to damp air or water, mechanical vibration and power abuse.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

Acute toxicity

Component(s)	CAS No.	LD ₅₀ (Oral)	LD ₅₀ (Dermal)	LC ₅₀ (Inhalation)
Aluminum Chloride	7446-70-0	Rat: 3450mg/kg Mouse: 1130mg/kg	Rabbit: >2000mg/kg	No data
Thionyl Chloride	7719-09-7	No data	No data	Rat: 500ppm/1H

Skin corrosion/irritation:	Causes severe skin burns (Category 1B).
Eye corrosion/irritation:	Causes serious eye damage (Category 1).
Respiratory sensitization:	These products are not known to cause human respiratory sensitization.
Skin sensitization:	These products are not known to cause skin sensitization.
Germ cell mutagenicity:	According to the existing data, the product is not classified.
Carcinogenicity:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

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Reproductive toxicity:	1,2-dimethoxyethane: Reproductive toxicity (Category 1B).
Specific target organ toxicity - single exposure:	According to the existing data, the product is not classified.
Specific target organ toxicity - repeated exposure:	According to the existing data, the product is not classified.
Aspiration hazard:	According to the existing data, the product is not classified.
Additional reproductive toxicity hazards:	According to the existing data, the product is not classified.

Section 12 Ecological Information

Acute aquatic toxicity

Component(s)	CAS No.	LC ₅₀ Fish(96h)	EC ₅₀ Crustaceans (48h)	ErC ₅₀ Algae
Aluminum Chloride	7446-70-0	6.17mg/L	1.9mg/L	0.515 (96h)

Persistence and degradability

Persistence:	No data.
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Bioaccumulative potential

Bioaccumulation:	No data.
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Mobility in soil

Mobility:	No data.
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Other adverse effects

1	Do not allow material to be released to the environment without proper governmental permits.
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Section 13 Disposal Considerations

Waste disposal

Residual waste:	Before disposal should refer to the relevant national and local laws and regulation. The generation of waste should be avoided or minimized wherever possible.
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	Recommended transfer to a suitable container and arrange for collection by specialized disposal company if recycling is not feasible.
Contaminated packaging:	The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Disposal considerations:	Dispose of container and unused contents in accordance with national and local relevant regulations laws.

Section 14 Transport Information

Transport Information

UN No.:	UN3090 or UN3091
UN Transport name:	Lithium Metal Batteries(including Lithium Primary Batteries) or; Lithium Metal Batteries Contained In Equipment(including Lithium Primary Batteries) or Lithium Metal Batteries Packed With Equip (including Lithium Primary Batteries)
Hazard class(es) :	IMDG: 9 IATA: 9 ADR/RID: 9 Depending on their lithium metal content, some single cells and small multi-cell battery packs may be non-assigned to Class 9.
Packaging group:	N/A
Environmental hazard Marine pollutant (Yes/No):	No
ICAO/ATA:	The transportation of primary lithium cells and batteries is regulated by the International Air Transport Association (According to Section II/Section 1B of PACKING INSTRUCTION 968, or Section II of PACKING INSTRUCTION 969~970 of IATA DGR 63 rd Edition for transportation), International Civil Aviation Organization, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment: Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185.

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	The transport of primary lithium batteries is prohibited aboard passenger aircraft.
IMDG CODE:	The batteries are not restricted to IMDG Code 2020 Edition (Amdt 40-20) according to special provision 188.
ADR/AND:	The batteries are not subject to the provisions of United Nations Economic Commission for Europe (UNECE) ADR/ADN if they meet the requirements of special provision 188 of Chapter 3.3. Applicable as from 1 January 2019.

Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport.

In addition, to be permitted in transport each lithium cell and battery types must have passed the applicable tests set out in Subsection 38.3 of the UN Manual of Tests and Criteria.

Section 15 Regulatory Information

Regulatory information:

Reference to the local, national, US, EU, CA and international regulations.

CAS No.	TSCA	EINECS	DSL	IECSC	NZIoC	PICCS	KECI	AICS
7439-93-2	✓	✓	✓	✓	✓	✓	✓	✓
7782-42-5	✓	✓	✓	✓	✓	✓	✓	✓
9002-84-0	✓	✓	✓	✓	✓	✓	✓	✓
7719-09-7	✓	✓	✓	✓	✓	✓	✓	✓
7446-70-0	✓	✓	✓	✓	✓	✓	✓	✓

TSCA:	United States Toxic Substances Control Act Inventory
EINECS:	European Inventory of Existing Commercial Chemical Substances
DSL:	Canadian Domestic Substances List
IECSC:	China Inventory of Existing Chemical Substances
PICCS:	Philippines Inventory of Chemicals and Chemical Substances
NZIoC:	New Zealand Inventory of Chemicals
KECI:	Existing and Evaluated Chemical Substances
AICS:	List of existing chemical substances in Australia

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★ Note:	“√” Indicates that the substance included in the regulations “×” That no data or included in the regulations
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Section 16 Other Information

Abbreviations or phrases

ACGIH:	American Conference of Governmental Industrial Hygienists
ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	Chemical Abstracts Service
CLP:	Classification, labeling and packaging
EC:	Council of Europe
ECHA:	European Chemicals Agency
EINECS:	European Inventory of Existing commercial Chemical Substances
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
RID:	Regulation for rail International transportation of Dangerous goods
ICAO:	International Civil Aviation Organization
IMDG:	International Maritime Dangerous Goods Code
IC ₅₀ :	Inhibitory Concern Triton 50%
LC ₅₀ :	Lethal Concentration 50%
LD ₅₀ :	Median Lethal Dose 50%
MAPROL:	International Convention for the Prevention of Pollution from Ships
REACH:	REGULATION concerning the Registration, Evaluation, Authorization and Restriction of Chemicals
STEL:	Short Term Exposure Limit
TWA:	Time Weighted Average
MAC:	Maximum Allowable Concentration
OSHA:	Occupational Safety and Health Administration
NIOSH:	National Institute for Occupational Safety and Health

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TLV:	Threshold Limit Value
TLV-TWA:	Threshold Limit Value-Time Weighted Average
TLV- STEL:	Threshold Limit Value-Short term Exposure Limit
PC-TWA:	Permissible Concentration-Time Weighted Average
PC-STEEL:	Permissible Concentration-Short Term Exposure Limit
PEL:	Permissible Exposure Limit
OELs:	Occupational Exposure Limits

Reference

1	IARC
2	OECD: The Global Portal to Information on Chemical Substances
3	U.S. Department of Transportation: ERG
4	Germany GESTIS-database on hazard substance
5	CAMEO Chemicals
6	NLM: ChemIDplus
7	EPA: Integrated Risk Information System
8	IPCS: The International Chemical Safety Cards (ICSC)

Disclaimer

1	The above information is believed to be correct but we can not guarantee the absolute universality and accuracy and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.
2	TUV-Laboratory ensures the objectivity and fairness of the test and fulfills the confidentiality obligations of the applicant's information. The applicant is responsible for the authenticity of the submitted samples and information. The results shown in this report relate only to the samples tested. The test results only reflect the evaluation of the sample being tested and are not used for other purposes. TUV-Laboratory shall not be liable for any loss arising from or in connection with this report, contract, tort, regulation or other reasons. This report is invalid or has been copied in whole or in part if there is no approver signature and TUV-Laboratory testing special seal. This report may not be published as an advertisement without the approval of the TUV-Laboratory. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is illegal and the offender may be prosecuted to the fullest extent of the law.

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锂电池 UN38.3 试验概要 Lithium Battery Test Summary

项目编号: WHFAT20210904UG13

单位信息 Company Information					
委托单位 Consignor	武汉孚安特科技有限公司 武汉市汉阳区黄金口三村 270 号加华科技产业园 3 号楼 2 层 电话/Tel: 18627884463 邮箱/Mail: 4458879476@qq.com 网址/Website: https://www.fansobattery.com				
生产单位 Manufacturer	武汉孚安特科技有限公司 武汉市汉阳区黄金口三村 270 号加华科技产业园 3 号楼 2 层 电话/Tel: 18627884463 邮箱/Mail: 4458879476@qq.com 网址/Website: https://www.fansobattery.com				
测试单位 Test Lab	广州邦禾检测技术有限公司 中国广东省广州市番禺区市广路钟三路段 13 号之一 电话/Tel: 4008-368-355 邮箱/Mail: service@mcmtek.com 网址/Website: https://www.mcmtek.com				
电池信息 Battery Information					
名称 Name	锂-亚硫酰氯电池 Lithium Thionyl Chloride Battery	电池/电芯类别 Battery/Cell Classification		锂金属电芯 Lithium Metal Cell	
型号 Type	ER14505M	商标 Trademark		FANSO	
额定电压(V) Normal Voltage(V)	3.6V	额定容量(mAh) Rated Capacity(mAh)		2100mAh	
额定能量(Wh) Watt-hour rating (Wh)	不适用 N/A	外观/Appearance		橙色圆柱形 Orange Cylindrical	
质量(g)/Mass(g)	17.5g	锂含量(g)/Li Content(g)		0.6g	
测试信息 Test Information					
测试报告编号 Test Report Number	WHFAT20210904U13	测试报告签发日期 Date of Test Report		2022.01.04	
测试标准 Edition of UN Manual of Tests and Criteria Used	联合国《关于危险货物运输的建议书-试验和标准手册》(第 7 版) 38.3 节 UN Recommendations on the Transport of Dangerous Goods Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Subsection 38.3				
T.1: 高度模拟 Altitude Simulation	通过 Pass	T.2: 温度试验 Thermal Test	通过 Pass	T.3: 振动 Vibration	通过 Pass
T.4: 冲击 Shock	通过 Pass	T.5: 外部短路 External Short Circuit	通过 Pass	T.6: 撞击/挤压 Impact/Crush	通过 Pass
T.7: 过度充电 Overcharge	不适用 N/A	T.8: 强制放电 Forced Discharge	通过 Pass		
UN38.3.3(f)	不适用 N/A		UN38.3.3(g)		不适用 N/A
签名 Signatory 职务 Title	Runkang Ye 检验员		签发日期 Issued Date	2022.01.04	



SPECIFICATION



ER14505M 3.6V

Electrical characteristics

(Typical values relative to cells stored for one year at +30 °C max)

○ Nominal capacity	2100mAh
Discharged capacity at 3mA, +25 °C, 2.0V cut off	
○ Open circuit voltage	3.66V
○ Max. recommended continuous current	400mA
○ Max. Pulse capability	1000mA
1000mA, 0.1 second pulses every 2 minutes, drained with 50%, 3mA at 25 °C from undischarged cells with 20µA base current, yield voltage readings above 2.7V, the value may vary according to the pulse characteristics, the temperature and the cell's previous history	
○ Operating temperature rang	-55 °C ~ +80 °C

STORAGE:


Stored in clean, dry and cool circumstances (the temperature should be 20 degrees or lower, less than 30 degrees)

WARNING:

Don't charge, crush, disassemble, expose contents to water, heat above 85°C or may lead to explosion, burn or poison goods leakage. Discarded battery should be buried deeply to the ground.

Key features

- High and stable operating voltage
- Long shelf life
- Annual self-discharge rate lower than 1% at +25°C
- Long operating life
- High energy density (700wh/kg)
- Wide operating temperature rang
- Stainless steel can and cover
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Compliant with IEC 86-4 safety standard
- Non-restricted for transport

 UL Component Recognition
File Number MH46165

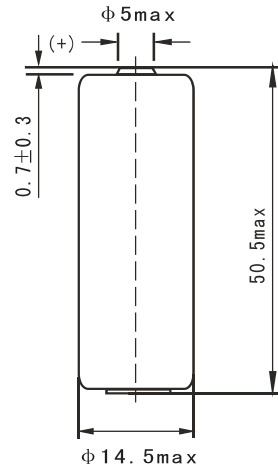
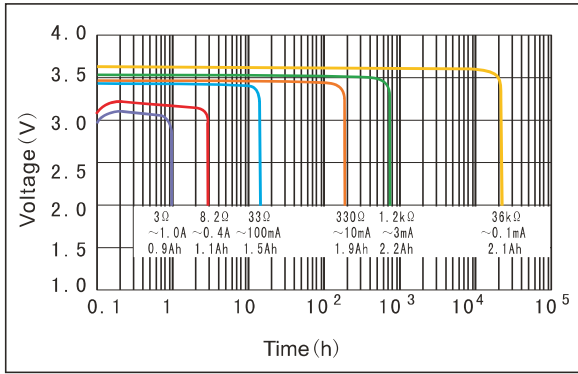
Main applications

- Intelligent instrument
- Military electronics instrument
- Alarms or security equipment
- Memory backup
- GPS tracking
- Car electronics
- Professional electronic equipment

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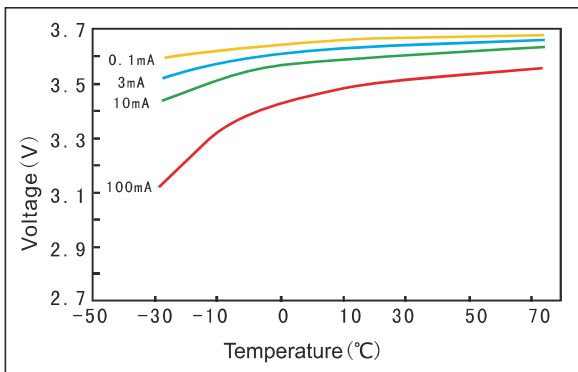
ER14505M 2100mAh

Discharge characteristics at 25°C



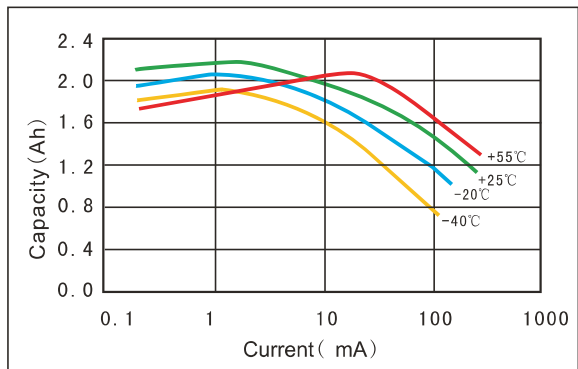
Dimensions in mm
 Weight: 19g

Voltage vs Temperature curve

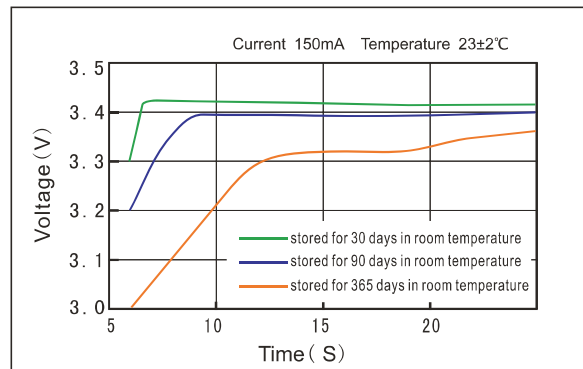


Available Terminations	
-/P*	Axial pin
-/T /PT2*	Radial Pin
-/PT /TP*	Polarized Tab
(*) : Reference to Standard Terminals for Single Cells	

Capacity vs Current curve (cut off with 2.0V)



Discharge characteristics after storage



Data in this page is subject to change without notice and becomes contractual only after written confirmation by Fanso.