深圳市计量质量检测研究院
Shenzhen Academy of Metrology & Quality Inspection

MSDS REPORT

For

Rechargeable Lithium ion Cell
Model Number: 1165110

Report Number : WT203202956

Test Laboratory	:	Shenzhen Academy of Metrology and Quality Inspection
Site Location	:	No.92,Longzhu Avenue, Nanshan District, Shenzhen, Guangdong, China
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重 要 声 明

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The test results presented in the report apply only to the tested sample. The product information and the applicant information are provided by the customer and SMQ assumes no responsibility for their validity and accuracy.

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投诉及报告/证书真伪查询电话 Complaint hotline： 0086-755-86928949 Email：complaint@smq.com.cn

TEST REPORT DECLARATION

Applicant	:	Hunan Times New Energy Technology Co., Ltd.
Address		7/F, Comprehensive Building, Innovation Pioneer Park, High-tech Industrial Development Zone, Wuxi , Luxi , Hunan , China
Factory	:	Hunan Times New Energy Technology Co., Ltd.
Address		Tai He Mei Industrial Park, High-tech Industrial Development Zone, Wuxi, Luxi, Hunan, China
Product Name	:	Rechargeable Lithium ion Cell
MODEL No	:	1165110
Trade mark	:	TIMES
Date of EUT Receive	:	2020-12-24

Test Standards:

1. ST/SG/AC.10/30/Rev.7 Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
2. ISO11014-2009 Safety data sheet for chemical products – Content and order of sections

The Sample described above is tested by Shenzhen Academy of Metrology and Quality Inspection Battery Laboratory to determine the battery performance. Shenzhen Academy of Metrology and Quality Inspection Battery Laboratory is assumed full responsibility for the accuracy of the test results.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Project Engineer: 陈静 (Wen Cui) Date: Jan.06,2021

Checked by: (Wen Cui) Date: Jan.06,2021

Approved by: 李保军（技术主管） Date: Jan.06,2021
Li Baojun (Director)

Material Safety Data Sheet

Section 1—Chemical product and company identification

Chemical product information

Sample Description	:	Rechargeable Lithium ion Cell
Model	:	1165110
Nominal Voltage	:	3.7V
Charge Limited Voltage		4.2V
Nominal Capacity / Energy	:	10000mAh / 37Wh
Sample Receiving Date	:	2020-12-24
Sample Uses	:	---

Supplier information

Manufacturer	:	Hunan Times New Energy Technology Co., Ltd.
Address	:	7/F, Comprehensive Building, Innovation Pioneer Park, High-tech Industrial Development Zone, Wuxi , Luxi , Hunan , China
Tel	:	13510344310(Zhiqiang Zhang)
Emergency telephone	:	13510344310(Zhiqiang Zhang)
E-mail	:	zhangzhiqiang@timesenergy.cn

Section 2—Hazards identification

Physical and chemical hazards	:	Risk of exposure occurs only if the cell is mechanically or electrically abused.
Health hazards		There is on hazard under conditions of normal use.
Environmental hazards	:	There is on hazard under conditions of normal use.
Other hazards	:	There is on hazard under conditions of normal use.
Classification according to GHS	:	Not a dangerous substance according to GHS.
Emergency overview	:	No information available.

Section 3—Composition/information on ingredients

☐Substance ☒mixture			
ingredient	Molecular	CAS No.	Weigh
Graphite	C	7782-42-5	18%-21%
Manganese	Mn	7439-96-5	20%-24%
Lithium	Li	7439-93-2	2%-3%
Nickel	Ni	7440-02-0	5%-8%
Cobalt	Co	7440-48-4	2%-3%
Aluminium	Al	7429-90-5	4%-6%
COPPER	Cu	7440-50-8	8%-11%
Lead	Pb	7439-92-1	Not Detected
Cadmium	Cd	7440-43-9	Not Detected
Mercury	Hg	7439-97-6	Not Detected

Note：CAS——Chemical Abstracts Service (Division of the American Chemical Society).

Section 4—First-aid measures

General information	:	No special measures required.
After inhalation	:	Remove victim to fresh area, use oxygen if available. Administer artificial respiration if breathing is difficult. Seek medical attention.
After skin contact	:	Remove contaminated clothing and shoes. Immediately wash with water and soap and rinse thoroughly. Wash clothing and shoes before reuse. If irritation occurs, get medical attention.
After eye contact	:	Flush eyes with plenty of water for several minutes while holding eyelids open. Get medical attention if irritation persists.
After swallowing	:	Give at least 2 glasses of milk or water.Induce vomiting unless patient is unconscious. Get medical attention.
The main symptoms	:	No relevent details information.
Health effects	:	No relevent details information.
To protect the rescuers advice	:	No relevent details information.
To the doctor's advice	:	Need timely medical treatment and special symptoms, no relevant details information.

Section 5—Fire-fighting measures

Suitable extinguishing agents	:	Use extinguishing agent suitable for local conditions and the surrounding environment. Such as dry powder, CO_2.
Special hazards arising from the substance or mixture	:	Cell may burst and release hazardous decomposition products when exposed to fire situation. Lithium ion batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature (＞150℃), when damaged or abused; may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.
Attention extinguishing method and protective measures	:	Wear self-contained respirator. Wear fully protective impervious suit.

Section 6—Accidental release measures

Homework personnel protective measures, protective equipment and emergency disposal procedures	:	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.
Environmental precautions	:	Do not allow material to be released to the environment without proper governmental permits.
Steps to be taken in case material is spilled or released and waste disposal method	:	Remove ignition sources, evacuate area. Sweep up using a method that does not generate dust. Collect as much of the spilled material as possible, placed the spilled material into a suitable disposal container. Keep spilled material out of sewers, ditches and bodies of water. All waste must refer to the United Nations, the national and local regulations for disposal.
To prevent the secondary disasters prevention measures	:	See section 7 for information on safe handling. See section 8 for information on personal protection equipment. See section 13 for disposal information.

Section 7—Handling and storage

Precautions for safe handling	:	Avoid mechanical or electrical abuse. The batteries 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 cell, forced over-discharge, throw to fire. Do not crush or puncture the cell, or immerse in liquids. Consumption of food and beverage should be avoided in work areas. Wash hands with soap and water before eating, drinking. Ground containers when transferring liquid to prevent static accumulation and discharge.
Conditions for safe storage, including any incompatibilities	:	Requirements to be met by storerooms and receptacles. Store in a cool, dry, well-ventilated place, which is subject to little temperature change. Keep away from heat, avoiding the long time of sunlight.

Section 8—Exposure Controls and personal Protection

Biological limit	:	No relevant details information.
Detection	:	No relevant details information.
General protective and hygienic measures	:	The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.
Respiratory protection	:	In case of cell venting, provide as much ventilation as possible. Use suitable respirator when high concentrations are present. Protection is not necessary under conditions of normal use.
Hands protection	:	Wear protective gloves.
Eyes protection	:	Wear tightly sealed goggles.

Section 9—Physical and chemical properties

Physical properties

Appearance	:	Silvery-white
Form	:	pouch
Odour	:	Odourless

Chemical properties

Cathode material	:	Nickel cobalt manganese oxide litium
Negative material	:	Graphite

Electrical properties

Rated capacity	:	10000mAh
Energy	:	37Wh
Normal voltage	:	3.7V

Section10—Stability and reactivity

Chemical stability	:	Stable in normal circumstances.
Possibility of hazardous reaction	:	Data not available.
Conditions to avoid	:	Heating, mechanical abuse and electrical abuse.
Incompatibilities	:	If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.
Hazardous combustible products	:	lithium oxide fumes, hydrogen.

Section11—Toxicological information

Acute toxicity LD/LC50 values relevant for classification	:	Not available. Note: LC-lethal concentration, 50 percent kill LD-lethal dose, 50 percent kill.
Skin irritation/ corrosion	:	exposure to internal contents, the corrosive fumes will be very irritation to skin. overexposure can cause symptoms of non-fibrotic lung injury.
Eyes stimulus/ corrosion	:	exposure to internal contents, the corrosive fumes will be very irritation to eyes and mucous membranes. overexposure can cause symptoms of membrane irritation.
Breathing or skin irritation	:	No further relevant information available.
Germ cell respectively	:	No further relevant information available.
Carcinogenicity	:	No further relevant information available.
Reproductive toxicity	:	No further relevant information available.
Specific target organ system toxicity disposable contact	:	No further relevant information available.
Specific target organ system toxicity repeated contact	:	No further relevant information available.
Inhalation hazard	:	No further relevant information available.
Potentially harmful effects	:	No further relevant information available.

Section12—Ecological information

Aquatic toxicity	:	No further relevant information available.
Persistence and degradability	:	No further relevant information available.
Behavior in environmental systems	:	No further relevant information available.
Bioaccumulative potential	:	No further relevant information available.
Mobility in soil	:	No further relevant information available.
Additional ecological information	:	Do not allow material to be released to the environment without proper governmental permits.

Section13—Disposal considerations

Waste treatment methods and recommendation : Consult state, local or national regulations to ensure proper disposal.

Uncleaned packaging and recommendation : Disposal must be made according to official regulations.

Section14—Transport information

	IATA	IMDG
UN Number	UN3480	UN3480
UN Proper shipping name	Lithium ion batteries (including lithium ion polymer batteries)	Lithium ion batteries (including lithium ion polymer batteries)
Transport hazard class(es)	9	9
Packing Group	965 section Ⅰ A	---
Marine pollutant	No	No

Transport information : The rechargeable Lithium ion cell (1165110 10000mAh, 3.7V) has passed the test UN38.3, according to the report ID: WT203200218, issued by Shenzhen Academy of Metrology & Quality Inspection.

According to the Packing Instruction 965 section Ⅰ A of IATA DGR 62nd 2021 and the IMDG CODE (Amdt 39-18), the package is classified as dangerous goods Class (or division) 9, UN3480.

More information concerning shipping, testing, marking and packaging can be obtained from Label master at http://www.labelmaster.com

Separate Lithium ion cell when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain.

Transport fashion : By air, by sea.

Section15—Regulatory information

《Dangerous Goods Regulation》(DGR)

《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 Substances Control Act》(TSCA)

《Consumer Product Safety Act》(CPSA)

《Federal Environmental Pollution Control Act》(FEPCA)

《The Oil Pollution Act》(OPA)

《Resource Conservation and Recovery Act》(RCRA)

《Safety Drinking Water Act》(CWA)

《Code of Federal Regulations》(CFR)

In accordance with all Federal, State and Local laws.

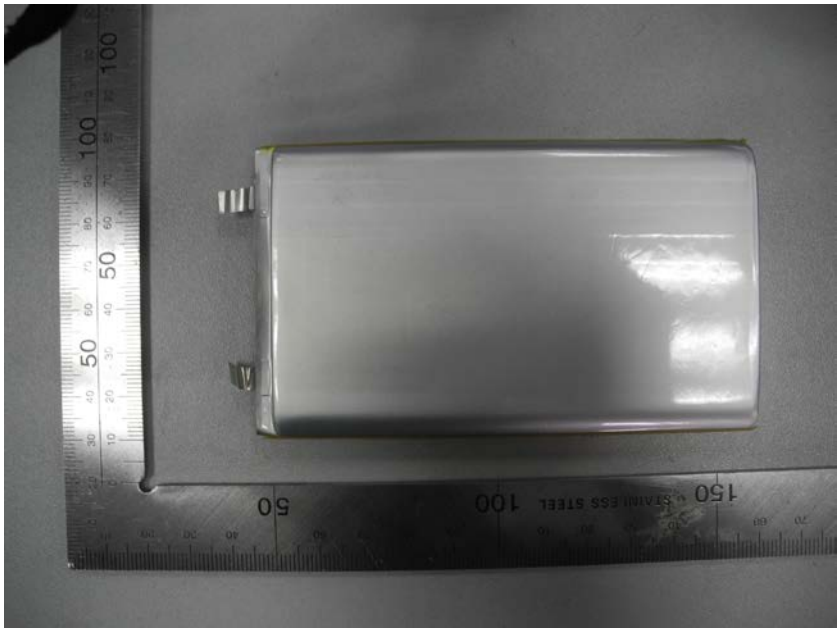
Section16—Other information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

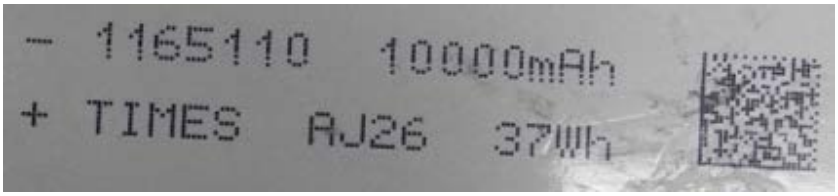
Photos

Picture1 Front side of the sample

Picture2 Back side of the sample



Picture3 Marking of the sample



End of Report