



Material Safety Data Sheets

For

Lithium battery

Model Number:

402030, 351518, 351020, 401121, 501121, 301030, 401030, 401135, 401230, 501230, 302030, 502030,
602030, 702030, 802030, 402025, 502025, 302035, 402035, 502035, 602035, 702035, 501235, 401235,
601235, 301730, 401730, 501730, 301735, 401735, 402040, 302040, 402530, 302530, 303035, 403035,
503035, 603035, 302540, 402540, 502540, 303040, 403040, 503040, 603040, 803040, 503443, 603443,
303759, 403759, 503759, 603759, 403048, 503048, 603048, 423450, 523450, 603450, 083450, 103450,
551838, 3057123, 3868111, 903060, 302323, 545085, 501430, 501435, 451225, 502248, 523448,
602020, 356495, 4070100, 4068125, 606170, 506170, 506971, 403485, 403282, 4030160, 3068115,
5030100, 4030100, 603493, 603095, 401020



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Report No.	: UNI20200101MR-1
Applicant	: Dongguan Sunrise Technology Co.,Ltd.
Address	: No.28,TheSencondJinshaRoad,JinshadunIndustrialPark,ShuikouVillage,DalangTown, DongguanCity, GuangDong.
Manufacture	: Dongguan Sunrise Technology Co.,Ltd.
Address	: No.28,TheSencondJinshaRoad,JinshadunIndustrialPark,ShuikouVillage,DalangTown, DongguanCity, GuangDong.
Date of Test	: Jan.,20,2020 to Dec., 20,2020
Date of Issue	: Jan., 20, 2020

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Section 1

Identification of the substance /preparation and of the company/undertaking

Identification of the preparation	:	Lithium Battery
Company Identification	:	Dongguan Sunrise Technology Co.,Ltd.
Company Address	:	No.28,TheSencondJinshaRoad,JinshadunIndustrialPark,ShuikouVillage, DalangTown,DongguanCity, GuangDong.
Fax	:	+86-0769-81621233
Off-hour Emergency Phone Number	:	+86-15012737070
Mail	:	2405121373@qq.com
MSDS No.	:	UNI20200101MR-1

Section 2

Composition/ Information on Ingredients

Substance/Preparation : Lithium Battery

Component of Lithium Battery: LiCoO₂, C, LiPF₆, EC, DEM

Ingredients And Composition of Lithium Battery:

Component/Substance	Percentage by weight
Li	6.69 ± 0.2%
Co	56.81 ± 0.2%
C	95.00 ± 0.2%



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Section 3

Hazards Identification

Do not short circuit, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above the declared operating temperature range of the product.

Health Hazards:

No hazard exists under normal use. Can cause thermal and chemical burns upon contact with the skin.

Environment Hazards:

Like any sealed container, battery cells may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials

Section 4

First Aid Measures

Skin and Eyes:

In the event that battery ruptures, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.

Inhalation:

If vapors or fumes from vented or leaking battery are irritating to respiratory tract, move to fresh air. Seek medical attention immediately.

Ingestion:

Ingestion of a battery can be harmful. Call The National Capital Poison Control Center or your local Poison Control Center, day or night - for advice and follow-up.

Section 5

Fire-Fighting Measures

Combustible: Not applicable

Special fire-fighting Procedures:

As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition product

Hazardous thermal (de) composition products:

Like any sealed container, battery cells may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials.

Emergency treatment: Use water, foam or dry powder, as appropriate



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Section 6

Accidental Release Measures

Procedures to contain and clean up leaks or spills:

In the event of a battery rupture, prevent skin contact and collect all released material in a plastic lined metal container.

Reporting procedure:

Report all spills in accordance with Federal, State and Local reporting requirements.

Waste disposal method:

Earth or sand should be used to absorb the exudation, seal leaking battery and earth in a heavy duty polythene bag and dispose of as special waste in accordance with local regulations.

Section 7

Handling and Storage

Handling precautions:

Do not short circuit or expose to temperatures above the temperature rating of the battery. Do not recharge, over-discharge, force discharge, immerse, puncture or crush.

Storage:

Store in a cool place but prevent condensation on cells and batteries. Elevated temperatures can result in shortened battery life and degrade performance. Do not store batteries in high humidity environments for long periods of times.

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

Section 8

Exposure Controls/ Personal Protection

Respiratory protection:

Wear a niosh approved self contained breathing apparatus in the pressure demand mode, or a fullface supplied air respirator.

Ventilation:

Mechanical ventilation and / or local exhaust, sufficient in pattern and volume, to meet tlv requirements

Protective gloves:

Use polyethylene or nitrile gloves if frequent skin contact is likely.

Eye protection:

Safety glasses with splash guards or side shielding recommended. Other protective clothing or equipment:

Wear impervious clothing if bodily exposure is anticipated.

Work / Hygienic practices:

Do not wear contact lenses. Wash contaminated clothing before reuse. Wear protective safety equipment as necessary to minimize contact. Wash hands with soap and water.



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Section 9

Physical and Chemical Properties

Appearance:	Solid	Color	Silvery
Smell:	No data	PH	No data
Solubility:	No data	Melting Point	No data
Flash point:	No data	Explosive	No data
Specific heat:	No data	Flammability	No data

Section 10

Stability and Reactivity

Stability:

Product is stable under normal storage and handling conditions.

Conditions to avoid:

High temperatures or incinerate. Deform, mutilate, crush, Pierce, short circuit. expose over a long period to humid conditions

Materials to avoid:

Oxidizing agents, alkalis, water.

Hazardous reactions:

Lithium metal reacts with water to produce highly flammable gasses.

Section 11

Toxicological Information

Acute Toxicity:

Inhalation	:	Lung irritant
Ingestion	:	Poisoning if swallowed
Eye Contact	:	Eye irritant
Skin Contact	:	Skin irritant
Chronic Toxicity	:	No data available
Sensitization	:	No data available
Mutagenicity	:	No data available
Carcinogenicity	:	No data available
Reproductive Toxicity	:	No data available
Other	:	No data available



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Section 12

Ecological Information

Ecotoxicity: No data available

Environmental Fate: No data available

Environmental Degradation: No data available

Soil Absorption / Mobility: Slowly bio-degradable

Section 13

Disposal Considerations

Wast Nature:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

Recovery and reuse:

Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

Section 14

Transport Information

Data Audit Units: United Testing Technology (HongKong) Limited

Shipping name: Lithium battery

Hazard classification: Depending on their lithium polymer content

Packaging Type: No data available

Mode of transport: Sea, air, road, railway transport

UN Number: UN3481

Packaging Mark: No data available

The consignment complies with the current edition-58th 2020 of the IATA regulation

1. Section II of packing instruction 967 (for Lithium-ion Cell / Batteries Packed in equipment ship as " Not Restricted " Cargo).
2. UN manual of tests and criteria, part III, sub-section 38.3 (withstanding a 1.2m drop test), and meets all requirements under UN manual of tests and criteria part III, sub-section 38.3.
3. With content of lithium less than 30Wh per cell or 100Wh per battery.

The consignment can be shipped as " Not Restricted " in accordance with the current edition of IATA-DGR-2011.

A) This consignment does not contain any recalled and / or defective batteries.

B) This consignment have been packed in comply with Section II of PI967.

C) Handle with care, Flammability hazard exists if the package is damaged.

D) In any event of the package is fond damaged, please follow the special procedures. If package is damaged, batteries must be protected so as to prevent short circuit



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No	ITEMS	RESULT	REMARKS
1	Altitude simulation	Pass	Test 1 to 5 must be conducted in sequence on the same cell or battery
2	Thermal test	Pass	
3	Vibration	Pass	
4	Shock	Pass	
5	External short circuit	Pass	
6	Impact	Pass	
7	Overcharge	Pass	Only battery do need this test item
8	Forced discharge	Pass	

The product is not classified as dangerous under the current edition of the ICAO & IATA dangerous goods regulations and according P1996 all applicable Carriers. The product is safe for air transportation and not regulated by ICAL & IATA DGR.

Section 15

Regulatory Information

Risk Phrases:

R 14/15 Reacts violently with water liberating extremely flammable gases.

R21 harmful in contact with skin

R22 harmful if swallowed

R35 causes severe burns

R41 risk of serious damage to the eye

Safety advises:

S2 keep out of reach from children

S8 keep away from moisture

S24 avoid contact with skin

S26 in case of contact with eyes, rinse immediately with plenty of water and seek medical attention

Do not incinerate Do not disassemble Do not short circuit

Use specified charger only



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Section 16

Other information

Date: Jan., 20 2020

Department: Quality department

Data Audit Units: United Testing Technology (HongKong) Limited

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Appearance Photo of Sample



*****End of Report*****