MATERIAL SAFETY DATA SHEETS

Applicant : MP EXTRA

Address : 14 RUE CHARLES V,75004 PARIS,FRANCE

SAMPLE INFORMATION

Sample name : LI-ION BATTERY

Sample Model : 18650, 14430, 14500, 17335, 18500, 18350, 18650, 26650, 26500, 20700, 21700

Trademark : VAP PROCELL

TEST INFORMATION

Receipt Date : 2019-04-08

Issue Date : 2019-04-10

Test Items : Material Safety Data Sheets

REMARKS

1. The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.
2. Sample State: Solid
3. Sample Package: Intact
4. Ambient Condition During Testing: 20 ^{0}C, 45% RH.

Tim Chen

Test/Witness Engineer

Shenzhen H.X. Detect Certification Co., Ltd. HX

Andy Zhang

Approved & Authorized

Section 1 - Material and vendor information

Identification of the preparation	:	LI-ION BATTERY
Company Identification	:	MP EXTRA
Company Address	:	14 RUE CHARLES V,75004 PARIS,FRANCE
Off-hour Emergency Phone Number	:	+33 667 552 550
Email	:	info@vapprocell.com

Section 2 - Composition/ Information on Ingredients

Component/Substance	Percentage by weight	CAS#
Contains Electrolyte salt and solvents	5-20%	12057-17-9
Lithium hexafluorophosphate	0.05-5%	21324-40-3
Includes one or more of the following Ethelyne Carbonate Propylene Carbonate Diethyl Carbonate	5-20%	96-49-1 108-32-7 105-58-8
Polyvinylidenfluoride	<1%	24937-79-9
Cu	3-15%	7440-50-8
Al	2-10%	7429-90-5
Lithium cobalt oxide	20-50%	12190-79-3
Graphite	10-30%	7782-42-5

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

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.

Section 9 - Physical and Chemical Properties

Appearance:	Solid	Nominal voltage	3.7V
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: Oxiding 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

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

Waste 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

Not to a hazard material or hazard goods for transportation.

Separate, nickel metal hydride batteries 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. The container must be handled carefully. Do not give shocks that result in a mark of hitting in cell. Please refer to section 7-HANDLING AND SHTORAGE.

Transport Fashion: by road, by air, by ship

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

Section 16 - Other Information

Department: Quality department.

Data Audit Units: Shenzhen HX Detect Certification Co., Ltd.

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