

Report No.: 104013022316D~1

MSDS Report



Sample Description & Model

Cylindrical Lithium-ion Battery(F®18650 2600)

Applicant

First New Energy Co., Ltd

Address

Jiangxi Yichun Economic Development Zone

No.: I04013022316D Code: ib1ha3n



Tel:

天津市南开区红旗路臺覧 大厦10层 Add (022) 27360730

(DHotline 400-819-5688 -3 上海市輸工区柱中路680号 35号模切 (021) 64851999 宁波市馬斯区新廊路150号 二期4号楼+层 (0574)87736499

深圳市南山区创业路中兴 工业城6栋1层 (0755) 26050909 广州市海珠区教和路189号 海珠科技丽3号楼7层 (020)89224310 青島市轄山区株洲路190 号6层 (0532) 88706866



Report No.: I04013022316D~1 Date: 04.10.2014 Page 1 of 11

Material Safety Data Sheet

According to ISO11014:2009 & GB16483-2008

Section 1 - Chemical Product and Company Identification

Chemical product identification

Sample Description: Cylindrical Lithium-ion Battery

Sample Model: F®18650 2600

Sample Photo:





Authenticate the photo on original report only

Company identification

Manufacturer: First New Energy Co., Ltd

Address: Jiangxi Yichun Economic Development Zone

Tel: 0795-3666188 Fax: 0795-3666118 Post code: 336000

Further Information obtainable from Emergency telephone: 0795-3666188

E-mail: py_kk1985@126.com

Section 2 - Hazards Identification

No harm at the normal use. If contact the electrolyte in the battery, reference as follows:

Classification of the substance or mixture

Classification according to GHS

Acute toxicity, Oral (Category 4)

Acute toxicity, Dermal (Category 3)

Skin, irritate (Category 1B)

www.ponytest.com

(Hotline 400-819-5688

北京市海淀区苏州街49-3 号源智大厦 Add:

(010) 82618116

天津市南开区红旗路畫寶 大厦10层 Add: (022) 27360730

上海市徐江区柱平路680号 35号楼4层

宁波市高新区新库路150号 二期4号楼4层 (0574)87736499

深圳市南山区创业路中兴 工业城6栋1层

青岛市崂山区株洲路190 号6层 (0532) 88706866

广州市海珠区敦和路189号 海珠科技聞3号機7层



Report No.: I04013022316D~1 Date: 04.10.2014 Page 2 of 11

Eyes, irritate (Category 1)

Label elements

Labelling according to Regulation (EC) No 1272/2008[CLP]

Hazard pictogram(s):

Signal word:

Danger

Hazard statement(s):

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage

H302: Harmful if swallowed.

Precautionary statement(s):

Prevention:

P280: Wear protective gloves/protective clothing/eye protection

/ face protection.

Response:

P312: Call a POISON CENTER or doctor/ physician if you feel

P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and

water

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT

induce vomiting

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

Disposal:

P501: Dispose of contents/container in accordance with

local/national regulations

Other hazards

No information available.

Section 3 - Composition, Information on Ingredients

Chemical characterization: Mixture

Chemical Composition	CAS No.	EC#	Weight (%) 36.1 15.8	
Lithium Manganese Nickel And Cobalt				
Graphite	7782-42-5	231-955-3		
Rubber	69028-37-1		0.88	
Acetylene Black 1333-86-4 231-153-3		0.91		
SBR	9003-55-8		0.47	

www.ponytest.com

Add: Tel:

(C) Hotline 400-819-5688

北京市海淀区苏州街49-3 号逾智大厦 (010) 82618116 Add: Tel:

天津市南开区红旗路鳳覧 大厦10层

(022) 27360730

上海市徐汇区柱平路680号 深圳市南山区创业路中英 35号楼4层 工业城6栋1层 (021) 64851999

(0755) 26050909

青岛市崂山区株洲路190 号6层 (0532) 88706866

宁波市高新区新晖路150号 二期4号楼4层 广州市海珠区数和路189号 海珠科技国3号楼7层 (0574) 87736499 (020) 89224310



Report No.: I04013022316D~1 Date: 04.10.2014 Page 3 of 11

Lithium Hexafluorophosphate	21324-40-3	244-334-7	1.78 3.51
EC	96-49-1	202-510-0	
EMC	623-53-0		3.22
DMC	616-38-6	210-478-4	3.14
Copper	7440-50-8	231-159-6	8.3
Aluminum	7429-90-5	231-072-3	3.5
Nickel	7440-02-0	231-853-9	0.22

Section 4 - First Aid Measures

Description of first aid measures

General information No special measures required.

After eye contact

Flush eyes with plenty of water for several minutes while holding eyelids open. Get medical attention if irritation persists.

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 inhalation

Remove victim to fresh area. Administer artificial respiration if breathing is difficult. Seek medical attention.

After swallowing

Do not induce vomiting. Get medical attention.

Information for doctor:

Indication of any immediate medical attention and special treatment needed No further relevant information available.

Section 5 - Fire Fighting Measures

Flammability: Not available.

Extinguishing media

Suitable extinguishing agents

(020) 89224310

广州市海珠区敦和路189号 海珠科技园3号楼7层

Report No.: 104013022316D~1 Date: 04.10.2014 Page 4 of 11

Use extinguishing agent suitable for local conditions and the surrounding environment. Such as dry powder, CO2.

Special hazards arising from the substance or mixture

Battery may burst and release hazardous decomposition products when exposed to a fire situation. Lithium ion batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature(>150°C(302°F)), when damaged or abused (e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.

Advice for firefighters

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency 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

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.

Waste disposal method

All waste must refer to the United Nations, the national and local regulations for disposal.

Reference to other sections

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

Handling

Precautions for safe handling

Consumption of food and beverage should be avoided in work areas.

www.ponytest.com CHotline 400-819-5688

Tel:

北京市海淀区苏州街49-3 号益智大厦 Add.

(010) 82618116

天津市南开区红旗路赢費 大厦10层 Add: (022) 27360730

(021) 64851999

分波市高新区新辉器150号 一間4号標4周

上海市徐汇区桂平路680号 深圳市南山区创业路中兴 35号楼4层 上业城6株1层 (0755) 26050909

广州市海珠区敦和路189号 海珠科技园3号楼7层 (020) 89224310

青島山崎山区株洲路190 号6周 (6532) 88706886

Report No.: 104013022316D~1 Date: 04.10.2014 Page 5 of 11

Wash hands with soap and water before eating, drinking.

Ground containers when transferring liquid to prevent static accumulation and discharge.

Information about fire and explosion protection

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

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles

Store in a cool, dry, well-ventilated place.

Information about storage in one common storage facility

Keep away from heat, avoiding the long time of sunlight.

Further information about storage conditions

Keep container tightly sealed.

Specific and use

No further relevant information available.

Section 8 - Exposure Controls, Personal Protection

Control parameters

Ingredients with limit values that require monitoring at the workplace:		
12190-79-3 Lithium (Cobalt Oxide	
TLV (USA)	0.02mg/m ³ .	
MAK(Germany)	0.1mg/m ³ .	

Exposure controls

Personal protective equipment

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

Use suitable respirator when high concentrations are present.

Personal Protection

Protection of hands

Add: Tel:

北京市海淀区苏州街49-3 号務智大厦 Add.

(010) 82618116

天津市南开区红旗路赢费 (022) 27360730

(021) 64851999 宁波市岛新区新辉路150号 二期4号楼4层 (0574)87736499

上海市徐江区桂平路680号 深圳市南山区创业路中兴 35号楼4位 工业城6栋1层

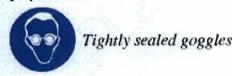
青岛市崎山区株洲路190 号6层 (0532) 88706866

广州市海珠区敦和路189号 海珠科技园3号楼7层 (020) 89224310

Report No.: I04013022316D~1 Date: 04.10.2014 Page 6 of 11



Eve protection



Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

General information

Pink. Appearance:

Cylindrical. Form: Odorless. Odour:

Not available. pH:

Change in condition

Melting point: Not available. **Boiling point:** Not available. Not available. Freezing point Not available. Flash point: Flammability: Not available. Not available. Ignition temperature: Not available. **Decomposition temperature:**

Not available. Self-igniting: Not available. Danger of explosion:

Explosion limits

Lower: Not available. Not available. Upper: Oxidizing properties: Not available. Not available. Vapour pressure:

Density: Not available.

Not available. Relative density:



www.ponytest.com

© Hotline 400-819-5688

北京市海淀区苏州街49-3 号劢初大厦 Add:

(010) 82618116

天津市南开区红旗路礦實 大厦10层 Tel: (022) 27360730

上海市徐江区柱平路680号 35号楼4星 (021) 64851999

深圳市南山区创业路中兴 工业城6株1层 (0755) 26050909

胃岛市崂山区株洲路190 (0532) 88706866

宁波市高新区新晖路150号 二期4号楼4层 (0574)87736499 广州市海珠区敦和路189号 海珠科技园3号標7层 (020) 89224310



Report No.: I04013022316D~1 Date: 04.10.2014 Page 7 of 11

Not available. Vapour density:

Not available. **Evaporation rate:**

Solubility in/Miscibility with water: Not available.

n-octanol/water partition coefficient: Not available.

Not available. **Viscosity**

Not available. Dynamic:

Kinematic: Not available.

Other information:

3.6V Voltage

Electric capacity 2600mAh

Section 10 - Stability and Reactivity

Reactivity: Data not available. Chemical stability: Stable.

Possibility of hazardous reactions: Data not available.

Conditions to Avoid

Flames, sparks, and other sources of ignition, incompatible materials.

Incompatibilities

Oxidizing agents, acid, base.

Hazardous Combustible Products

Carbon monoxide, carbon dioxide, lithium oxide fumes.

Hazardous Polymerization

N/A.

Section 11 - Toxicological Information

Information on toxicological effects

Acute toxicity

LD/LC50 Values relevant for classification:

Not available.

Primary irritant effect

No further relevant information available.

Sensitization:

No further relevant information available.



Report No.: I04013022316D~1 Date: 04.10.2014 Page 8 of 11

Additional toxicological information:

Toxicological, metabolism and distribution:

No further relevant information available.

Acute effects (acute toxicity, irritation and corrosivity):

No further relevant information available.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

No further relevant information available.

Section 12 - Ecological Information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behaviour in environmental systems

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Ecological effects

Additional ecological information

General notes:

Do not allow material to be released to the environment without proper governmental permits.

Other adverse effects: No further relevant information available.

Section 13 - Disposal Considerations

Waste treatment methods

Recommendation:

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

Section 14 - Transport Information

(022) 27360730

Add: Tel:

(010) 82618116

天津市南开区红旗路臺寶 大厦10层

(020) 89224310



Report No.: I04013022316D~1 Date: 04.10.2014 Page 9 of 11

UN Number			
IATA	UN3480		
IMDG	None		
Model Regulation	None		
UN Proper shipping name			
IATA	Lithium Ion Batteries		
IMDG	None		
Model Regulation	None		
Transport hazard class(es)			
IATA	9		
IMDG	None		
Model Regulation	None		
Packing group			
IATA	None		
IMDG	None		
Model Regulation	None		
Environmental hazards			
Marine pollutant:	No		
Special precautions for user	Not applicable.		

Transport information: The Cylindrical Lithium-ion Battery (F®18650 2600) has passed the test UN38.3, according to the report ID: I04013021921D and I04013021921D~1.

According to the Packing Instruction 965 section II of IATA DGR 55th Edition for transportation.

According to the special provision 188 of IMDG (36-12). The products are not subject to dangerous goods.

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

Separate Lithium-ion 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.

Transport Fashion: By air, by sea.

Section 15 - Regulatory Information



www.ponytest.com

Tel:

(C) Hotline 400-819-5688

(0574) 87736499

Add: 北京市海淀区苏州街49-3 号為個大厦

Add: 天津市南开区红旗路高賞 大廈10局 (022) 27360730

宁波市高新区新晖路150号 二期4号標4层

深圳市南山区创业器中兴 工业城6栋1层

青岛市崂山区株洲路190 号6层 (0532) 88706866 广州市海珠区教和路189号 海珠科技局3号楼7层 (020)89224310



Report No.: I04013022316D~1 Date: 04.10.2014 Page 10 of 11

This Material Safety Data Sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture

Composition	CAS#	TSCA	EC#	EINECS
Graphite	7782-42-5	Listed	231-955-3	Listed
Rubber	69028-37-1	Listed		Not Listed
Acetylene Black	1333-86-4	Listed	231-153-3	Listed
SBR	9003-55-8	Listed		Not Listed
Lithium Hexafluorophosphate	21324-40-3	Listed	244-334-7	Listed
EC	96-49-1	Listed	202-510-0	Listed
EMC	623-53-0	Listed		Not Listed
DMC	616-38-6	Listed	210-478-4	Listed
Copper	7440-50-8	Listed	231-159-6	Listed
Aluminum	7429-90-5	Listed	231-072-3	Listed
Nickel	7440-02-0	Listed	231-853-9	Listed

Section 16 - Additional Information

Abbreviations and acronyms

EU regulation (EC) No 1272/2008 on classification, labelling and packaging CLP:

of chemical substances and mixtures.

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

American Conference of Governmental Industrial Hygienists ACGIH:

TLV: Threshold Limit Value

International Air Transport Association IATA:

Tel:

www.ponytest.com

(C) Hotline 400-819-5688

北京市海淀区苏州街49-3 号蘸智大厦 Add:

(010) 82618116

天津市南开区红旗路赢宴 大厦10层 Add: (022) 27360730

上海市條件区柱平路680号 深圳市南山区创业路中兴 35号楼4切 工业城6陈1层 (021) 64851999 (0755) 26050909

青岛市朝山区株洲路190 (0532) 88706866

学波市高新区新辉路150号 二期4号校4层 (0574)87736499 广州市海珠区敦和路189号 海珠科技開3号楼7层 (020)89224310



Report No.: I04013022316D~1 Date: 04.10.2014 Page 11 of 11

Pony Testing International Group

IMDG:

International Maritime Dangerous Goods

LC50:

lethal concentration, 50 percent kill

LD50:

lethal dose, 50 percent kill

TWA

Time Weighted Average

TSCA EINECS United States Toxic Substances Control Act Section 8(b) Inventory European Inventory of Existing Commercial Chemical Substances

Model

Recommendations on the Transport of Dangerous Goods Model

Regulation

Regulations

Declare to reader

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.

Prepared by:

Approved by:

MSDS Creation Date: April 10, 2014

End of report

Tel:

Add:

Tel:

青岛市崂山区株洲路190 号6周

(0532) 88706866