

Section 1 - Product Identification/ Manufacturer and Supplier's Information

IDENTITY Product Category

: Lithium Ion Rechargeable Cell

Model Name

: IFR13N0/IFR018650

Nominal Voltage

: 3.2 V

Nominal Capacity

: 1500 mAh

Chemical System

: Lithium Iron Phosphate / Carbon

Design for Recharge

: ⊠ Yes. □ No.

Manufacture Date: Jan/06/2020

Manufacturer's Name

: PHET

Supplier's Name

: Pihsiang Energy Technology Co., Ltd.

Supplier's Address

: NO.7 Gongyeh 5 Road Hsinchu Industry Park, Huko Taiwan

R.O.C.

Information Telephone

: 886-3-5977360

Ext:2001

Emergency Telephone

: 886-3-5978574

Date Prepared Signature of Paper : January 15, 2020 : Weir-Mirn Hurng

Section 2 – Composition/Information on Ingredients

Material or Ingredients

Cathode

: Lithium Iron Phosphate LiFePO4

(CAS# 15365-14-7) (50% wt)

Anode

: Carbon

(CAS# 7782-42-5) (25% wt)

Electrolyte

: ETHYLENE CARBONATE/PROPYLENE CARBONATE (CAS#96-

49-1 (20% wt) / CAS#108-32-7 (5% wt))

Section 3 – Hazards Identification

Important Note

: The cell should not be opened or burned, since the above ingredients

contained within, or their discharge or combustion products, could be

harmful under some circumstance if exposed.

Others

: Lithium Ion content is less than 4.8 Watt-hour; Active metals such

Lithium metal is also not added. Heavy metals such as Mcrcury,

Cadmium, Lead and Chromium are not added in the cell.

Section 4 – First – Aid Measures

Under normal conditions of use, these chemicals are contained in sealed can; therefore, risk of exposure occurs if the cell is mechanically abused.



Inhalation

: Contents of an opened battery can cause respiratory irritation.

Provide fresh air and call a doctor.

Skin Contact : Contents of an opened battery can cause skin irritation.

Wash the skin with soap and water.

Eye Contact : Contents of an opened battery can cause eye irritation.

Immediately flush eyes thoroughly with water for at least 15 minutes.

Seek medical attention.

Section 5 – Fire Fighting Measures

Lithium Ion Batteries are non-hazardous, non-flammable and non-explosion products. In case of fire, it is permissible to use any class of extinguishing medium or water on these cells or their packing material. Cool exterior of cells if exposed to fire to prevent rupture.

Section 6 – Accidental Realease Measures

- Place in appropriate container;
- Wash spill site with soap solution;
- Flush spill area with copious amount of water.

Section 7 - Handling and Storage

Storage

: Store in a cool, well-ventilated area. Elevated temperatures can result in

shortened cell life. Since short circuit can cause burn hazard and leak or

explode hazard, do not cells jumbled in bulk containers.

Handling

: Do not short.

Do not mix different condition or lot cells together in the battery pack.

Do not directly heat, solder or throw into fire.

Such unsuitable use can cause leakage, explosion or fire.

Charging

: This cell is designed for recharging.

Charging condition shall be in accordance with manufacturer's

recommendation.

Section 8 – Exposure Controls/Personal Protection

Respiratory Protection

: Not necessary under normal use.

Ventilation

: Not necessary under normal use.

Eye Protection

: Not necessary under normal use.

Protective Gloves

: Not necessary under normal use.

Section 9 – Physical and Chemical Properties



| APPEARANCE | Colored cylinder | |
|------------------|------------------------|--|
| ODOR | Odorless | |
| SOLUBILITY | Data not yet available | |
| SPECIFIC GRAVITY | Data not yet available | |

Section 10 – Stability and Reactivity

| Stability | Stable under normal conditions of use and storage. |
|----------------------------------|---|
| Hazardous Decomposition Products | Thermal decomposition of electrolyte will produce toxic |
| | fume, vapor or dust. |
| Incompatibilities | Avoid contact with strong bases, acids, combustible |
| Incompatibilities | organic materials. |
| Conditions to Avoid | Prolonged overcharge; sources of ignition. |

Section 11 – Toxicological Information

Potential Health Effects:

| Skin | Direct contact with electrolyte may cause severe irritation, burns and ulceration. | |
|------------------------|---|--|
| Eyes | Direct contact with electrolyte may cause severe irritation, burns, cornea damage, or blindness. | |
| Acute Health Hazards | Repeated or prolonged contact may cause skin irritation damage to cornea, and upper respiratory irritation. | |
| Additional Information | No health effects are expected related to normal use of this product as sold. | |

Section 12 – Ecological Information

Since a battery cell and the internal materials remain in the environment, do not bury or throw out into the environment.

Section 13 – Disposal Considerations

Disposal : Dispose in accordance with applicable federal, state and/or local regulations.

Section 14 – Transport Information

Transport: PHET lithium ion batteries are not subject to the requirements of U.S.

Department of Transportation (DOT) Hazardous Material Regulations because such of our batteries meet the exceptions under 173.185(b). The only acceptation to this is our batteries that contains less 0.5 grams of lithium per cell and is not subject to the regulations because it meets the requirements of 173.185(c). (Lo., passes the UN T1 to T8)



They are considered to be non-dangerous by the International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) because they meet all the requirements of Special Provision PI965 Section IB as described by both organizations.

They are considered to be non-dangerous by the International Maritime Dangerous Goods regulations 61th (IATA) because they meet the requirements of UN 3480. The only requirements for shipping these batteries in all modes of transportation is that they must be separated to prevent short-circuits and to prevent movement that could lead to short-circuits. They must also be packed in strong packaging that can withstand the rigors transportation.

CAUTION: FIRE OR EXPLOSION IF INCORRECTLY INSTALLED, SHORTED, DISASSEMBLED, HEATED OR DISPOSED IN FIRE.

Section 15 – Regulatory Information

See SECTION 14

Section 16 – Other information

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURROPT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. PIHSIANG ENERGY TECHNOLOGY CO., LTD. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTIONG FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.