Safety Data Sheet

Lithium Iron Phosphate battery cells

- SECTION 1: Identification
    - Product names or identifiers:
        - LiFePO4 cell
        - Lithium Iron Phosphate battery cell
        - Fortune cell (trademark name not used or owned by Overkill Solar)
        - FREY36130290-100PF
    - Use: Rechargeable battery cell.
    - Appearance: Rectangular solid, blue color, with 2 threaded stud terminals on one end.
    - Distributor:

        Overkill Solar LLC
        3673 Exchange Ave Suite 3
        Naples, FL 34104

    - Manufacturer:

        Jiangsu Frey Battery Technology Co., LTD
        No 10, Kangping Road,
        Xuzou Naitional Hi-Tech Industrial Development Zone,
        Jiangsu Province, China.

    - Emergency telephone number for Overkill Solar

        1-330-299-9901 (Emergency use only- not for customer service)

- SECTION 2: Hazards identification
    - Under normal use, this battery cell is not expected to expose the user to hazardous ingredients. Based on 29 CFR 1910.1200 this product meets the definition of an “article” and is not subject to the hazards associated with the individual components when used as intended.
    - The battery cell contains a pressure release valve that may discharge harmful mist or vapors if the cell is misused or damaged.
    - Do not short-circuit or bridge the terminals with metal objects, including jewelry.
    - Do not cut, disassemble, or modify the battery cell, this can release hazardous internal ingredients.
    - Do not overcharge the battery cells or expose to high heat or fire, this can cause the release of harmful mist or vapors.
    - **Potential health effects:**
        - **Inhalation:** Vapors or mists from a ruptured cell may cause respiratory irritation.
        - **Ingestion:** Contents of a ruptured cell can cause serious irritation or chemical burns of mouth, esophagus, and gastrointestinal tract.
        - **Skin and eyes:** Contents of a ruptured cell can cause severe irritation or chemical burns to the skin and eyes.

- SECTION 3: Composition

Chemical name	CAS number	% by weight
Lithium Iron Phosphate	15365-14-7	40-42%
Stainless Steel	12597-68-1	23-25%
Dimethyl Carbonate	616-38-6	11-12%
Graphite	7782-42-5	11-13%
Copper	7440-50-8	9-10%
Aluminum	7429-90-5	3-5%
Propylene Carbonate	108-32-7	3-5%
Lithium hexafluorophosphate(1-)	21324-40-7	<1%
Tin	7440-31-5	<1%
Ethene,chloro-,homopolymer (PVC)	9002-86-2	<1%
Polyethylene	9002-88-4	<1%

- SECTION 4: First aid measures
    - **Inhalation:** Move to fresh air. Seek medical attention.
    - **Ingestion:** Rinse mouth thoroughly with water. Drink water and induce vomiting if directed by a medical professional. Seek medical attention.
    - **Skin contact:** Remove contaminated clothing and rinse skin with water for 15 minutes. Seek medical attention.
    - **Eye contact:** Rinse eyes with flowing water for 15 minutes (remove contact lenses). Seek medical attention.
    - If irritation persists, seek medical attention.
- SECTION 5: Firefighting measures
    - Extinguishing media: Dry chemical media or firefighting foam. Water is not recommended.
    - Toxic fumes, gases, or vapors may evolve on burning.
    - Avoid inhaling smoke, mist, or vapors.
    - Firefighters should wear full protective gear and self contained breathing apparatus.
- SECTION 6: Accidental release measure
    - Restrict access to the spill area until clean up is completed.
    - Clean up methods:
        - Wear protective eyewear and gloves to prevent eye and skin contact.
        - Absorb liquid spills with inert absorbent material such as clay kitty litter or sand.
    - Prevent spilled material from entering waterways or soil.
    - Scrub the area with soap and water. Collect contaminated water for disposal.
    - Dispose of damaged cells and clean up materials in accordance with local regulations.

- SECTION 7: Handling and storage
    - When handling intact cells, protect the terminals from short circuit or contact with metal objects.
    - Storage temperature: -10c to +45c. Protect from extreme heat.
    - Protect the cells from corrosive or acidic substances.
- SECTION 8: Exposure controls/personal protection
    - Under normal use, no PPE is required.
    - When working with intact cells, follow electrical safety procedures.
    - If cells are ruptured, Safety eyewear and chemical resistant gloves are required.
    - Avoid breathing mist or vapors. Provide as much ventilation as possible.
- SECTION 9: Physical and chemical properties
    - Form: rectangular solid with 2 threaded metal studs on one end.
    - Material: Outer case aluminum and stainless steel wrapped in PVC plastic
    - Color: Blue
    - Odor: none
    - Solubility: insoluble in water
- SECTION 10: Stability and reactivity
    - Reactivity: Aluminum case may react with corrosive substances.
    - Chemical stability: Stable under normal conditions.
    - Conditions to avoid: High temperatures over 70c, physical damage.
    - Hazardous decomposition products: Toxic fumes. May form peroxides on burning.
- SECTION 11: Toxicological information
    - Propylene Carbonate causes serious eye irritation.
    - Dimethyl carbonate is a highly flammable liquid and vapour.
- SECTION 12: Ecological information
    - Not known to be a marine pollutant.
    - Prevent spilled materials from contaminating waterways or soil.
- SECTION 13: Disposal considerations
    - Dispose of damaged cells and clean up materials in accordance with local regulations.
- SECTION 14: Transport information
    - UN number: UN3480
    - UN proper shipping name: Lithium Ion Batteries
    - Transport hazard class(es): 9
    - Packing group: n/a
    - Environmental hazards: none
    - Special precautions: none
- SECTION 15: Regulatory information
    - unknown
- SECTION 16: Other information
    - Revised 9-6-2021