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MATERIAL SAFETY DATA SHEET

For Rechargeable Polymer Li- Ion Battery MLP793444 of McNair

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

McNair Polymer Lithium Ion Battery

McNair MLP793444 1440mAh 3.7V Polymer Li-ion Battery

(Equivalent Lithium content: 0.432g and 5.328Wh/battery pack)

The UN classification number: Class 9

UN Number: UN3480 lithium ion batteries or

UN3481 lithium ion batteries packed with equipment or lithium ion batteries
contained in equipment

MANUFACTURER

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2. COMPOSITION INFORMATION

| HAZARDOUS INGREDIENTS | % | CAS NUMBER |
|--|-------|---------------------|
| Lithium Cobalt Dioxide (LiCoO ₂) | 25-35 | 12190-79-3 |
| Graphite(C) | 15-20 | 7782-42-5 |
| Poly Vinylidene Fluoride(PVDF) | 1-5 | 24937-79-9 |
| Acetylene Black | 0.5-3 | 1333-86-4 |
| Aluminium(AL) | 21-23 | 7429-90-5 |
| Copper (Cu) | 10-11 | 7440-50-8 |
| Carbon(proprietary) | 10-30 | 7440-44-0 |
| Electrolyte | 10-15 | 623-53-0/21324-40-3 |

3. HAZARDS IDENTIFICATION

Emergency Overview

May explode in a fire, which could release hydrogen fluoride gas and smoke.

Use extinguishing media suitable for materials burning in fire

PRIMARY ROUTES OF ENTRY

Skin contact, Skin absorption, Eye contact, Inhalation, and Ingestion: NO

| | |
|-----------------|----|
| Skin contact | No |
| Skin absorption | No |
| Eye contact | No |
| Inhalation | No |
| Ingestion | No |

SIGNS AND SYMPTOMS OF EXPOSURE

| | |
|------------------------|--|
| Skin contact | No effect under routine handling and use |
| Skin absorption | No effect under routine handling and use |
| Eye contact | No effect under routine handling and use |
| Inhalation | No effect under routine handling and use |
| Ingestion | No effect under routine handling and use |
| Reported as Carcinogen | Not applicable |

4. EMERGENCY AND FIRST AID MEASURES

INHALATION, EYE CONTACT, and SKIN CONTACT: Not a health hazard.

INGESTION

If swallowed, obtain medical attention immediately.

CAUTION

If exposure to internal materials within cell due to damaged outer casing, the following actions are recommended.

INHALATION

Leave area immediately and seek medical attention.

EYE CONTACT

Rinse eyes with water for 15 minutes and seek medical attention.

SKIN CONTACT

Wash area thoroughly with soap and water and seek medical attention.

INGESTION

Drink milk/water and induce vomiting; seek medical attention

5. FIRE FIGHTING MEASURES**GENERAL HAZARD**

Cell is not flammable but internal organic material will burn if the cell is incinerated. Combustion products include, but are not limited to hydrogen fluoride, carbon monoxide and carbon dioxide.

EXTINGUISHING MEDIA

Use extinguishing media suitable for the materials that are burning.

SPECIAL FIREFIGHTING INSTRUCTIONS

If possible, remove cell(s) from fire fighting area. If heated above 130°C, cell(s) may Swell/explode/vent.

If package is damage or heat, the package should be checked and repackaged well.

FIREFIGHTING EQUIPMENT

Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full protective gear.

6. ACCIDENTAL RELEASE MEASURES**ON LAND**

Place material into suitable containers and call local fire/police department.

IN WATER

If possible, remove from water and call local fire/police department.

7. HANDLING AND STORAGE**HANDLING**

No special protective clothing required for handling individual cells.

STORAGE

Store in a cool, dry place

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING CONTROLS**

Keep away from heat and open flame. Store in a cool dry place

PERSONAL PROTECTION

Respirator:

Not required during normal operations. SCBA required in the event of a fire

Eye/face protection:

Not required beyond safety practices of employer.

Gloves:

Not required for handling of cells.

Foot protection:

Steel toed shoes recommended for large container handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------|-----------|
| State | Solid |
| Odor | N/A |
| PH | N/A |
| Vapor density | N/A |
| Boiling point | N/A |
| Solubility in water | Insoluble |
| Specific gravity | N/A |
| Density | N/A |

10. STABILITY AND REACTIVITY

REACTIVITY

None during normal operating or handling conditions.

INCOMPATIBILITIES

None (during normal operation). Avoid exposure to heat, open flame, and corrosives

HAZARDOUS DECOMPOSITION PRODUCTS

None (during normal operating conditions). If cells are opened, hydrogen fluoride and carbon monoxide may be released.

CONDITIONS TO AVOID

Avoid exposure to heat and open flame. Do not puncture, crush or incinerate.

11. TOXICOLOGICAL INFORMATION

This product does not elicit toxicological properties during routine handling and use.

| | |
|-----------------------|----|
| Sensitization | No |
| Acute toxicity | No |
| Teratogenicity | No |
| Reproductive toxicity | No |

This product does not contain any kinds of the following substances and halogen-type flame retardants including Chlorine and Bromide type harmful flame retardants which are listed in appendix of TCO documents and relevant international ECO requirements.

| | |
|-------------------------------------|---------|
| Polybromated Biphenyls | (PBB) |
| Polybromated Biphenyl Ethers | (PBBE) |
| Polybromated Biphenyl Oxides | (PBBO) |
| Polybromated Diphenylethers | (PBDE) |
| Polychlorinated Biphenyl | (PCB) |
| Polychlorinated Diphenylethers | (PCDE) |
| Tetrabromophisphenol A | (TBBPA) |
| Asbestos, Antimonytrioxide, Dioxine | / |

None of the following substances will be exposed, leaked, or emitted during transportation, storage or any operation and any temperature condition:

Chlorinated Fluorohydrocarbon (FCKW)
 Acrylonitrile
 Styrol
 Phenol
 Benzol
 Mercury of greater than 0.0001 wt% for alkaline battery
 Mercury of greater than 0.0005 wt% for other battery
 Polymer content of greater than 0.5g/cell, 1.5g/battery
 Cadmium, lead, and other harmful heavy metal

This product does not contain mercury, cadmium and Polymer-metal.

| | |
|-----------------|-----|
| Mercury content | N/A |
| Polymer-metal | N/A |
| Cadmium content | N/A |

CAUTION

If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers

12. ECOLOGICAL INFORMATION

Some materials within the cell are bio-accumulative. Under normal conditions, these materials are contained and pose no risk to persons or the surrounding environment.

13. DISPOSAL CONSIDERATIONS

CALIFORNIA REGULATED DEBRIS

RCRA Waste Code: Non-regulated

Dispose of according to all federal, state, and local regulations.

14. REGULATORY INFORMATION

OSHA hazard communication standard (29 CFR 1910.1200)

Hazardous Non-hazardous

15. TRANSPORT INFORMATION

Polymer lithium ion batteries containing no more than 20Wh/cell and 100 Wh /battery pack can be treated as "Non-dangerous goods" under the United Nations Recommendations on the Transport of Dangerous Goods, Special Provision 188, if packaging is strong, suitable, limited weight, and prevent the products from short-circuit. Also concerned mark or label should be appeared on each outer box.

With regard to air transport, the following regulations are cited and considered:

I) The International Civil Aviation Organization (ICAO) Technical Instructions (2017-2018 Edition)

II) The International Air Transport Association (IATA) Dangerous Goods Regulations (58th Edition), Section II of PI967: lithium ion batteries contained in equipment.

Or Section II of PI966: Polymer lithium ion batteries packed with equipment;

Or Section II of PI965: Polymer lithium ion batteries (if >2pcs/carton, it meets Section IB of PI965);

III) The International Maritime Dangerous Goods (IMDG) Code (2014 Edition) with SP188;

IV) The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA (Part 49 CFR Sections 100-185),

V) The Office of Hazardous Materials Safety within the US Department of Transportation's (DOT) Research and Special Programs Administration (RSPA), and

VI) The UN Recommendations on the Transport of Dangerous Goods Model Regulations and the Manual of Tests and Criteria (UN38.3)

Our products are properly classified, described, packaged, marked, and labeled, and are

in proper condition for transportation according to all the applicable international and national governmental regulations, not limited to the above mentioned. We further certify that the enclosed products have been tested and fulfilled the requirements and conditions in accordance with UN Recommendations (T1~T8) on the Transport of Dangerous Goods Model Regulations.

| Manual of Test and Criteria(38.3 Polymer Lithium ion battery) | | |
|---|------------------------|--------|
| Test Item | Test Results | Remark |
| T1 | Altitude Simulation | Pass |
| T2 | Thermal Test | Pass |
| T3 | Vibration | Pass |
| T4 | Shock | Pass |
| T5 | External Short Circuit | Pass |
| T6 | Impact | Pass |
| T7 | Overcharge | Pass |
| T8 | Forced Discharge | Pass |

16. OTHER INFORMATION

For further information, please contact McNair New Power Co., Ltd. sales representative.
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Note:

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