Material Safety Data Sheet

Section 1 Product and Company Indentification

Data Sheet Number: PM2009005
Product Number: MBP-150
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Product : HyperMac Portable Power
Description: Smart Power Supply
Designated for rechargeable: Yes
Manufactured by: Sanho Digital Electronics Co.Ltd
5/F-11, Chuangye Building, Yuanshi Road
Ningbo City, China 315040
Phone Number (Technical Contact): +86-574-87900836
Emergency Phone Number: +86-574-87904750

Section 2 Composition/Information on IngredientsComposition/Information on Ingredients

Substance Approximate Percent of Total Weight

Item	Component	Weight %	CAS#
1	Metal Oxide(proprietary)	20.2	12190-79-3
2	Aluminum	3.5	7429-90-5
3	Graphite(proprietary)	9	7740-44-0
4	Electrolyte(proprietary)	9.3	--
5	Copper Foil	4.9	7440-50-8
6	Polyvinylidene Fluoride(PVDF)	1.1	24937-79-9
7	Remaining inert materials	52	N/A

Section 3 Hazards Indentification

Primary Routes of Entry:
►**Skin contact, Skin absorption, Eye contact, Inhalation, and Ingestion :** NO
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.
►**Reported as Carcinogen:** Not applicable
This product described in this Product Safety Data Sheet are sealed units which are not hazardous when used according to the recommendations of the manufacturer and as long as their integrity is maintained.
Do not open, puncture, incinerate, crush, deform, disassemble, force discharge, expose to

water, or expose to temperatures above the declared operating temperature range of the product. Fire, explosion and severe burn hazards may occur in such abuse conditions.
Keep this product away from small children. International Standard IEC 60086-4 contains more detailed information on safety of lithium batteries.

Section 4 First-aid Measures

Inhalation, Eye contact and Skin contact: No health hazard.
In case of leaking or accidentally opened Lithium ion cells contained in this product
► **Skin Contact:** Immediately wash off skin with plenty of water for at least 15 minutes.
Remove contaminated clothing and wash before reuse.
In severe cases obtain medical attention.
► **Eye Contact:** Immediately flush with plenty of water for at least 15 minutes.
In severe cases obtain medical attention.
► **Inhalation:** Leave area immediately and move to fresh air. Rest and keep warm.
In severe cases obtain medical attention.
► **Ingestion:** Rinse mouth and surrounding area thoroughly with water.
Drink milk/water and induce vomiting. Seek immediate medical attention.
In severe cases obtain medical attention.

Section 5 Fire-fighting Measures

General Hazard:
Cells contained in this product are not flammable but 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:
►In case of fire, use CO_2 or dry chemical extinguisher suitable for the materials that are burning.
►For fire in an adjacent area, water can be used.
Special fire fighting instructions:
►If possible, remove this product from fire fighting area. If heated above 120 ºC, cell(s) contained in this product can explode/vent.
► Dry chemical type extinguishers have only limited extinguishing potential.
B. Fire Fighting Equipment:
► Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full Protective gear.

Section 6 Accidental Release Measures

When housing of cells contained in this product is damaged, small amounts of electrolyte may leak. Seal this product air tight in a plastic bag or suitable containers, adding some dry sand, chalk ($CaCO_3$) or lime (CaO) powder or Vermiculite. Electrolyte traces may be wiped off dryly using household paper. Rinse with water afterwards.

Section 7 Handling and Storage

► No special protective requirement for handling this product.
► Storage within temperature range from -20 ºC to 45 ºC.
► Do not place near heating equipment, nor expose to direct sunlight for long periods.
►Store this product in clean environment without chemical vapour or excessive humidity. Elevated temperatures can result in reduced this product service life.

Section 8 Exposure Controls/Personal Protection

Engineering controls:
Keep away from heat and naked flame. Store in a cool and dry place.
Personal protection:
►Respirator: None required under normal use conditions. SCBA is required in the event of a fire.
►Hand protection: None required under normal use conditions. Use butyl gloves when handling leaked product.
►Eye/face protection: None required under normal use conditions. Wear safety glasses when handling leaked product.

Section 9 Physical and Chemical Properties

State	**Solid**
Odor	**N/A**
pH	**N/A**
Vapor pressure	**N/A**
Vapor density	**N/A**
Boiling point	**N/A**
Solubility in water	**Insoluble**
Specific gravity	**N/A**
Density	**N/A**

Section 10 Stability and Reactivity

This product is stable under the conditions described in Section 7.
Reactivity: None.
Incompatibilities: None during normal operation. Avoid exposure to heat, open flame and corrosives. Hazardous decomposition products: None during normal operating conditions. If cells contained in this product are opened, hydrogen fluoride and carbon monoxide may be released.
Conditions to avoid:
► Do not heat and expose uder the open flame or incinerate this product.
► Never impact, pierce or crush this product.
► Do not disassemble or modify this product.
► Do not place this product under high temperature conditions such as near a fire or in

the direct sunlight for a long time.

► Do not allow this product to get wet or be immersed in water.

Section 11 Toxicological Information

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

Sensitization:	Teratogenicity:	Reproductive toxicity:	Acute toxicity:
N/A	N/A	N/A	N/A

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:

Polybrominated Biphenyls (PBB)
Polybrominated Biphenyl Ethers (PBBE)
Polybrominated Biphenyl Oxides (PBBO)
Polybrominated Diphenylethers (PBDE)
Polychlorinated Biphenyl (PCB)
Polychloronated Diphenylethers (PCDE)
Tetrabromophisphenol (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)
Acrylonitride
Styrol
Phenol
Benzol
Mercury of greater than 0.0001 wt% for alkaline battery
Mercury of greater than 0.0005 wt% for other battery
Lithium content of greater than 0.5g/battery cell
Cadmium, lead, and other harmful heavy metal

And will comply with the regulation of 49 CFR (DOT regulation), International Air Transport Association (IATA), and Deuche Forschungsgemeinschaft (DFG) regarding concentrations of emitted substances.

This product does not contain mercury and lithium-metal.

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

Section 12 Ecological Information

Some materials within the cell contained in this product are bioaccumulative. Under normal conditions, these materials are contained and pose no risk to persons or the surrounding environment.

Section 13 Disposal Considerations

► This product do not contain hazardous materials according to EC directives91/157/EEC and 93/86/EEC.

► Dispose of or recycle in accordance with appropriate local regulations.

Section 14 Transport Information

This product is classified and regulated as dangerous good Class 9 dangerous good by the International Civil Aviation Organization (ICAO), International Air Transport Association (IATA), International Maritime Organization (IMO) and many government agencies. These organizations and agencies publish regulations that contain detailed packaging, marking, labeling, documentation, and training requirements that must be followed when offering these batteries for transport. Failure to comply with these regulations can result in substantial civil or criminal penalties.

The dangerous goods regulations require that each battery or cell designed be subject to the tests contained in Section 38.3 of the UN Manual of Tests and Criteria prior to being offered for transport. These batteries or cells have been tested and comply with all of the UN testing requirements.

Label for Transport	UN number required label on outer packaging
UN Number / IATA Class	UN 3481
Shipping Name	Smart Power Supply / HyperMac portable power
Packing Instructions	UN3481 PI 966 Part 1

Section 15 Regulatory Information

OSHA hazard communication standard (29 CFR 1910.1200)

_____Hazardous ___√_____Non-hazardous

Section 16 Other Information

This information relates only to the REACH regulation and specific material designated and may not be valid for such material used in combination with any other materials. Such information is to the best of our knowledge and is just used for health, safety and environmental purpose. It shall not be treated as any form of warranty. Please provide a proper training to the person who may use, manage of this material and those safety-handling persons.