



SHENZHEN EUNI BATTERY CO.,LTD

Eunicell
宇力电池

Material Safety Data Sheet

Alkaline Manganese Battery

NO. MSDS-E12V_13

Date : 06/2013

Model No. : MSDS – 12V Alkaline Battery : 23A

IDENTITY (As Used on Label and List)

Note : Blank spaces are not permitted if any item is not applicable or no information is available, the space must be marked to indicate that.

Manufacturer's Name

Manufacturer's Name
Shenzhen Euni Battery Co., Ltd
Emergency Telephone Number 86 755 260 77762
13F,Kangle Building,Nanshan Road,Nanshan District,Shenzhen City,China
Telephone Number for information
86- 755- 260 77762
Signature of Preparer (optional)

Main Chemical Components

Substance Name	Chemical Identification CAS#	% Weight
Zinc	7440-66-6	8%
Graphite	7782-42-5	3%
Iron	7439-89-6	37%
Potassium Hydroxide	1310-58-3	10%
Maganese Dioxide	1313-13-9	30%
Distilled Water	7732-18-5	11%
Others	N/A	1%

IMPORTANT NOTE: The battery should not be opened or burned. Exposure to the ingredients contained within or their combustion products could be harmful.

FIRE AND EXPLOSION HAZARD DATA

In case of fire, it is permissible to use any class of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture.

Fire fighters should wear self-contained breathing apparatus.



HEALTH HAZARD DATA

Under normal conditions of use, the battery is hermetically sealed.

Ingestion: Swallowing a battery can be harmful.

Contents of an open battery can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract. If battery or open battery is ingested, do not induce vomiting or give food or drink. Seek medical attention immediately.

Inhalation: Contents of an open battery can cause respiratory irritation. Provide fresh air and seek medical attention.

Skin Absorption: Mercury can be absorbed through intact skin causing symptoms similar to those of ingestion.

Skin Contact: Contents of an open battery can cause skin irritation and/or chemical burns. Remove contaminated clothing and wash skin with soap and water. If a chemical burn occurs or if irritation persists, seek medical attention.

Eye Contact: Contents of an open battery can cause severe irritation and chemical burns. Immediately flush eyes thoroughly with water for at least 15 minutes, lifting upper and lower lids, until no evidence of the chemical remains. Seek medical attention.

PRECAUTIONS FOR SAFE HANDLING AND USE

Storage: Store in a cool, well ventilated area. Elevated temperatures can result in shortened battery life.

Mechanical Containment: Batteries normally evolve hydrogen which, when combined with oxygen from the air, can produce a combustible or explosive mixture

unless vented. If such a mixture is present, short circuits, high temperature, or static sparks can cause an ignition.

Do not obstruct safety release vents on batteries. Encapsulation (potting) of batteries will not allow cell venting and can cause high pressure rupture.

Handling: Accidental short circuit for a few seconds will not seriously affect the battery. Prolonged short circuit will cause the battery to lose energy, and can cause the safety release vent to open. Sources of short circuits include jumbled batteries in bulk containers, metal jewelry, metal covered tables or metal belts used for assembly of batteries into devices.

Charging: This battery is manufactured in a charged state. It is not designed for recharging. Recharging can cause battery leakage or, in some cases, high pressure rupture. Inadvertent charging can occur if a battery is installed backwards.



SPECIAL PROTECTION INFORMATION

Ventilation Requirements: Not necessary under normal conditions.

Respiratory Protection: Not necessary under normal conditions.

Eye Protection: Not necessary under normal conditions. Wear safety glasses with side shields if handling an open or leaking battery.

Gloves: Not necessary under normal conditions. Use neoprene or natural rubber gloves if handling an open or leaking battery.

TRANSPORTATION INFORMATION

Eunicell's Alkaline Manganese Batteries are considered to be "Dry cell" batteries and are unregulated for purposes of transportation by the U.S. Department of Transportation (DOT), the International Civil Aviation Administration (ICAO), the International Air Transport Association (IATA) and the International Maritime Dangerous Goods Regulations (IMDG). The only DOT requirement for shipping Nickel Metal Hydride batteries is special provision 130 which states:

"Batteries, dry are not subject to the requirements of this subchapter only when they are offered for transportation in a manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals)". IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting.

According to IATA special provisions A 123 not dangerous goods

REGULATORY INFORMATION

Special requirement be according to the local regulatoryies.

OTHER INFORMATION

This data is offered in good faith as typical values and not as a product specification. The information in this data sheet was compiled from information supplied by the vendors of the components of this compound. No warranty, either expressed or implied is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

Must comply with packing instruction of IATA DGR 54th Edition 2013.