# **MATERIAL SAFETY DATA SHEET**

#### FUJIAN NANPING NANFU BATTERY Co., Ltd.

Jiangnan Hi-Tech Park, Nanping, Fujian, China 353000

Tel: +86 599 8735632 Fax: +86 599 8735117

## Section I—product Identification

Product Name: NanFu Alkaline Battery

Model:	LR03;LR6;LR14;LR20;6LR61		Nominal Voltage:	
Chemical S	System:	Alkaline Manganese Dioxide-Zinc Battery	Designated for Recharge:	No

#### Section II—Composition/Information on Ingredients

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

Chemical Name	CAS No.	Concentration/	Classification and
		Concentration range	Hazard labeling
Manganese Dioxide	1313-13-9	30-40%	Specific hazards
Graphite	7782-42-5	2-5%	
Zinc	7440-66-6	10-25%	
Potassium Hydroxide	1310-58-3	4-10%	
Steel can		10-20%	

# Section III-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.

# Section IV—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 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.

#### Section V—Precautions For Safe Handling and Use

**Storage:** Store in a cool, well ventilated area. Elevated temperatures can result in shortened battery life. **Mechanical Containment:** If potting or sealing the battery in an airtight container is required, consult Nanfeng Battery co., Ltd representative for precautionary suggestions. 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 same cases, high pressure rupture. Inadvertent charging can occur if a battery is installed backwards.

**Labeling:** If the Nanfeng label or package warnings are not visible, it is important to provide a package and/or device label stating:

CAUTION: DO NOT RECHARGE DISPOSE OF IN FIRE OR IMPROPERLY INSERT **Disposal:** Dispose in accordance with all applicable federal, state and local regulations.

## Section VI—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 if handling an open or leaking battery.

# Section VII—Transportation

These batteries manufactured or sold by Nanfeng Battery Co., Ltd are not regulated by the major international regulatory bodies as hazardous materials or dangerous goods when shipped. A shipping name of 'Alkaline Batteries' may be used on all domestic and international bills of lading.