cNODE Maxi alkaline battery

KONGSBERG

Battery safety data sheet

SECTION 1: Identification

The specification describes the technical parameters for the alkaline battery.

The battery is custom made.

- Product name: Alkaline battery cNODE Maxi
- Part number: 377269
- Manufacturer: Kongsberg Maritime AS
- Address: Strandpromenaden 50, 3190 Horten, Norway
- Telephone: +47 33 03 24 07 (24 h)
- Telefax: +47 33 04 29 87
- E-mail address: km.support.hpr@kongsberg.com
- Website: https://www.kongsberg.com/maritime

Note _

The alkaline battery is provided as a solid and sealed unit. The alkaline battery cannot be opened to reveal individual cells.

For additional information about the cells inside the sealed battery pack, see the safety data sheet provided by the cell manufacturer. http://www.varta.com

SECTION 2: Hazards identification

The alkaline battery is not provided with any hazards identification. It is not classified as dangerous or hazardous with normal use.

The alkaline battery must not be opened or burned. Exposure to the ingredients contained within the alkaline battery cells could be harmful. The alkaline battery cells are not classified as hazardous according to Regulation (EC) No. 1272/2008.

The chemicals in the battery cells are contained in a sealed enclosure. Risk of exposure occurs only if the cell is mechanically, thermally or electrically abused to the point of compromising the enclosure.

There is a risk of fire or explosion if the cells inside the battery are exposed to temperatures above $150 \,^{\circ}\text{C}$.

SECTION 3: Composition

The alkaline battery is a solid, manufactured article.

A battery pack consists of several individual cells that are electrical connected, both in series and parallel.

- Negative electrode: Zinc
- Positive electrode: Manganese dioxide
- Electrolyte: Potassium hydroxide

Battery identification:

- Battery name: Alkaline battery cNODE Maxi
- **Part number**: 377269

For additional information about the cells inside the sealed battery pack, see the safety data sheet provided by the cell manufacturer.

- Manufacturer: Varta
- Cell type: LR20
- Manufacturer's website: http://www.varta.com

SECTION 4: First aid measures

The alkaline battery will release toxic fumes if burned or exposed to fire.

These first aid measures are only for exposure to the chemicals inside the battery cells.

- Inhalation: The contents of a leaking battery may be irritating to respiratory passages. Move to fresh air. If the irritation persist, seek medical advice.
- Skin contact: Wash thoroughly with water. In severe cases obtain medical attention.
- Eye contact: Flush immediately with copious amount of clear tepid water for at least 15 minutes. Seek medical advice.
- Ingestion: If ingested, rinse mouth and surrounding area with tepid water. Do not induce vomiting. Do not give food or drink. Seek medical advice.

SECTION 5: Firefighting measures

The transponder is designed to withstand damage to the internal battery pack.

Batteries may burst and release hazardous decomposition products when exposed to a fire situation.

Suitable extinguishing media are foam, dry powder or carbon dioxide (CO₂).

Use a self-contained breathing apparatus.

When the battery burns it may produce hazardous fumes of zinc and manganese, hydrogen gas, caustic vapours of potassium hydroxide and other toxic by-products.

SECTION 6: Accidental release measures

During normal operation, accidental release measures are not applicable. Extreme mechanical abuse to the alkaline battery may result in a ruptured seal and exposure.

Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Clean-up personnel should wear appropriate protective clothing to avoid eye and skin contact and inhalation of vapours or fumes. Increase ventilation. Carefully collect batteries and place in an appropriate container for disposal.

SECTION 7: Handling and storage

Do not open, dissemble, crush or burn the alkaline battery.

Store batteries in a dry place at normal room temperature. Do not refrigerate, this will not make the batteries last longer. Elevated temperatures may result in a shortened battery life. Temperatures over 150 °C may result in battery leakage and rupture.

SECTION 8: Exposure control and personal protection

Airborne exposures to hazardous substances are not expected when the battery is used for its intended purpose. No protection (respiratory, skin and/or eye) is then required. If the battery is damaged, and you are exposed to the chemicals inside, proper personal protection is required.

In the event of fire or physical damage to the battery, follow the mandatory rules for personal protection.

- Fire or explosion: Use a self-contained breathing apparatus.
- Exposure to noxious gas: Chemical-resistant gloves and safety glasses.

SECTION 9: Physical and chemical properties

The alkaline battery is solid with a firm and hard surface. No chemicals are exposed during normal use and transportation.

The battery pack is provided as a solid and sealed unit. The battery pack cannot be opened to reveal the individual cells.

For additional information about the cells inside the sealed battery pack, see the safety data sheet provided by the cell manufacturer.

Cell manufacturer

- Manufacturer: Varta
- Manufacturer's website: http://www.varta.com

SECTION 10: Stability and reactivity

The alkaline battery is stable. No specific handling requirements apply.

Temperatures over 150 °C may result in battery leakage and rupture.

Do not disassemble, crush, short or install the battery with incorrect polarity. Avoid mechanical or electrical abuse. The alkaline battery will release toxic fumes if burned or exposed to fire.

SECTION 11: Toxicological information

Risk of irritation occurs only if the alkaline battery is abused to the point of breaking the container and opening it to reveal the individual cells.

If this occurs, irritation to the skin, eyes and respiratory tract may occur.

See sections 2, 3, 4 and 6.

SECTION 12: Ecological information

Provided that the battery pack is disposed of according to local regulations and/or law, it will not have any environmental impact.

SECTION 13: Disposal considerations

Dispose of the batteries in accordance with local, state and federal laws and regulations for batteries.

Do not incinerate, recharge or disassemble the battery packs.

SECTION 14: Transport information

Transportation of the cNODE Maxi alkaline battery must be performed in accordance with rules and regulations stated for transportation of dangerous goods in the applicable countries.

Alkaline batteries are considered to be dry cell and are unregulated for purposes of transport.

Transport identification codes:

• Aircraft: IATA DGR

Not restricted as per Special Provision A123.

- Sea transport: IMDG
- Railway: RID
- Road transport: ADR

SECTION 15: Regulatory information

Not applicable.

SECTION 16: Other information

The battery cell manufacturer's safety datasheet is available on their website.

• Varta: http://www.varta.com