

## Safety Data Sheet

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# Lithium battery packs for use in GMDSS Survival Craft Handheld Radiotelephones

### 1) Identification

**Product Name:** Simrad LTB1, Simrad LTB3  
*(order codes LTB1:Y, LTB1:O, LTB3:Y, LTB3:O)*

**Supplier:** Navico Logistics Europe B.V.

**Address:** Donker Duyvisweg 56  
3316 BM Dordrecht  
The Netherlands

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### 2) Composition/Information on Ingredients

Sealed battery pack containing 8 cells (LTB1) or 6 cells(LTB2). Cells contain the following material. %/wt is given per cell.

MATERIAL INGREDIENT	OR	PEL (OSHA)	TLV (ACGIH)	%/wt.
Carbon Black (CAS# 1333-86-4)		3.5 mg/m <sup>3</sup>	TWA 3.5 mg/m <sup>3</sup> TWA	0-4
1,2-Dimethoxyethane (CAS# 110-71-4)		None established	None established	2-4
1,3-Dioxolane (CAS# 646-06-0)		None established	None established	5-9
Graphite (CAS# 7782-42-5)		15 mg/m <sup>3</sup> TWA (total dust) 5 mg/m <sup>3</sup> TWA respirable fraction)	2 mg/m <sup>3</sup> TWA (respirable fraction)	0-4
Iron Disulfide (CAS# 1309-36-0)		None established	None established	24-35
Lithium or Lithium Alloy (CAS# 7439-93-2)		None established	None established	6.7
Lithium Iodide (CAS# 10377-51-2)		None established	None established	0.3-3
Non-Hazardous Components		None established	None established	Balance

### 3) Hazard Identifications

There are no safety hazards under normal usage.

This battery pack should not be opened or burned. Exposure to the ingredients contained within the cells or their combustion products could be harmful.

The battery should not be charged or subjected to short circuits

## 4) First Aid Measures

**Eye Contact:** 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.

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

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

**Skin Contact:** Remove contaminated clothing and wash skin with soap and water. If a chemical burn occurs or if irritation persists, seek medical attention.

**Note:** Carbon black is listed as a possible carcinogen by International Agency for Research on Cancer (IARC).

## 5) Fire Fighting Measures

In case of fire where lithium batteries are present, apply a smothering agent such as METL-X, sand, dry ground dolomite, or soda ash, or flood the area with water. A smothering agent will extinguish burning lithium batteries. Water may not extinguish burning batteries but will cool the adjacent batteries and control the spread of fire. Burning batteries will burn themselves out. Virtually all fires involving lithium batteries can be controlled with water. When water is used, however, hydrogen gas may evolve. In a confined space, hydrogen gas can form an explosive mixture. In this situation, smothering agents are recommended.

Emergency Responders should wear self-contained breathing apparatus. Burning lithium-iron disulfide batteries produce hydrogen sulphide gas, sulphur dioxide gas, toxic and corrosive lithium hydroxide fumes.

## 6) Accidental Release Measures

To cleanup leaking batteries:

**Ventilation Requirements:** Room ventilation may be required in areas where there are open or leaking batteries.

**Respiratory Protection:** Avoid exposure to electrolyte fumes from open or leaking batteries.

**Eye Protection:** Wear safety glasses with side shields if handling an open or leaking battery.

**Gloves:** Use neoprene or natural rubber gloves if handling an open or leaking battery.

Battery materials should be disposed of in a leak-proof container.

## 7) Handling and Storage

This battery is manufactured in a charged state. It is not designed for recharging. Store in cool, dry, well ventilated conditions.

Do not short out battery terminals.

## 8) Exposure Control / Personal Protection

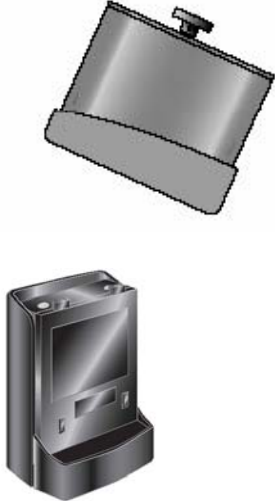
**Ventilation Requirements:** Not necessary under normal conditions.

**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.

## 9) Physical and Chemical Properties

Appearance	 <p data-bbox="824 1024 1318 1087">LTB1 : Colour may be either Yellow or Orange</p> <p data-bbox="824 1297 1318 1360">LTB3: Colour may be either Yellow or Orange</p>
Odour	Not applicable unless broken open
Stability in Water	Product is waterproof
Reaction with Water	Not applicable unless broken open
Flash Point	Not applicable unless broken open
Flammability	Not applicable unless broken open
Relative Density	Not applicable unless broken open
Solubility in Water	Not applicable unless broken open
Solubility - Other	Not applicable unless broken open

## 10) Stability and Reactivity

None unless broken open.

## 11) Toxicological Information

See section 2.

## 12) Ecological Information

None Advised.

## 13) Waste Considerations

Dispose of as electrical waste under the WEEE directive. Do not dispose of in the normal waste collection.

## 14) Transport Information

**Lithium content: LTB1: typically 7.84grams**  
**LTB3: typically 5.88grams**

Covered by IATA, ADR and IMDG regulations.

Classified as class 9 (IATA) Dangerous Goods regulations.

Batteries should be shipped as Classification 3090, packing instruction 968 part 2.

Batteries packed with equipment or contained in equipment should be shipped as Classification 3091, packing instructions 969 and 970 respectively.

Classified as class 9 (ADR M4) Dangerous Goods.

## 15) Regulatory Information

None advised

## 16) Other Information

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