



# **Safety Data Sheet**

## **(SDS)**

**Version: 2023**

**Prepared according to GB/T16483-2008&ISO11014:2009**

**Product Name: Emergency power inverter 8W EMERGENCY LED INVERTER**

**Model: 8EMINVERTER**

## Section 1 – Chemical Product

Product Identification: Lithium Battery Pack

Model No.: 8EMINVERTER

## Section 2 – Composition/Information on Ingredient

Hazardous Ingredients (Chemical Name)	Concentration or concentration ranges (%)	CAS Number
Lithium Cobalt Oxide	49.5	12190-79-3
PVDF	0.33	24937-79-9
Aluminium	7.6	7429-90-5
Graphite	16.3	7782-42-5
SBR	0.05	9003-55-8
Carboxymethylcellulose	0.28	9000-11-7
Copper	6.96	7440-50-8
Nickel	0.06	7440-02-0
Lithium Hexafluorophosphate	10.96	21324-40-3
Polyethylene	4.03	9002-884
Nylon	3.93	24937-16-4

## Section 3 – Hazards Identification

Explosive risk	This article does not belong to the explosion dangerous goods
Flammable risk	This article does not belong to the flammable material
Oxidation risk	This article does not belong to the oxidation of dangerous goods
Toxic risk	This article does not belong to the toxic dangerous goods
Radioactive risk	This article does not belong to the radiation of dangerous goods
Mordant risk	This article does not belong to the corrosion of dangerous goods
other risk	This article is the Lithium Battery Pack, Watt hour rate 20.48Wh.

## Section 4 – First aid measures

**After Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**After Skin Contact:** Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

**After Inhalation:** If inhaled, quickly leave the site to fresh air. If you stop breathing, perform artificial respiration. If breathing is difficult, supply oxygen.

**After Ingestion:** If swallowed, wash out mouth with water provided person is conscious Call a physician.

## Section 5 – Fire-fighting measures

**Characteristics of Hazard:** Toxic fumes; gases or vapors may evolve on burning

**Hazardous Combustion Products:** CO.CO<sub>2</sub>, HF, phosphorus fluoride.

**Fire-extinguishing Methods and Extinguishing Media:** Copious amounts of cold water are an effective extinguishing medium for lithium batteries. Don't use warm or hot water. Don't use Halon type extinguishing material.

**May use dry powder, sand, earth.**

**Attention in Fire-extinguishing:** The Firemen should put on antigas masks and full fire-fighting suits.

## Section 6 – Accidental Release Measures

When leakage of batteries happens, liquid could be absorbed with sands, earth, or other inert substance, and the contaminated area should be ventilated meantime.

Damaged batteries that are not hot or burning should be placed in a sealed plastic bag or container.

## Section 7 – Handling and storage

**Precautions for safe handling:** Consumption of food and beverage should be avoided in work areas. Wash hands with soap and water before eating, drinking. Ground containers when transferring liquid to prevent static accumulation and discharge.

**Information about fire and explosion protection:** Batteries may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

**Conditions for safe storage, including any incompatibilities:** Requirements to be met by storerooms and receptacles. Store in a cool, dry, well-ventilated place. Keep away from heat, avoiding the long time of sunlight.

## Section 8 – Exposure controls/personal protection

**Maximum Allowable Concentration:** No Standard available

**Engineering Controls:** no engineering controls are required for handling batteries that have not been damaged. Personal protective equipment for damaged batteries should include chemical resistant gloves and safety glasses.

## Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties	
Appearance	Gray
Form	Prismatic
Odour	Odorless

## Section 10 – Stability and reactivity

**Stability:** Stable under normal temperatures and pressures.

**Incompatibility:** Oxidizing agents.

**Conditions to Avoid:** Heat and open flame, short circuit, and water.

**Hazardous polymerization:** Will not occur.

**Decomposition Products:** CO, CO<sub>2</sub>, HF, Phosphorus fluoride.

## Section 11 – Toxicological information

**Signs & symptoms:** None, unless battery ruptures.

In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

**Inhalation:** Lung irritant.

**Skin contact:** Skin irritant.

**Eye contact:** Eye irritant

**Ingestion:** Poisoning if swallowed.

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to server irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

## Section 12 – Ecological information

**Ecological Toxicity:** N/A

**Biodegradability:** N/A

**Non-biodegradability:** N/A

**Other Hazardous:** Will not effect environmental evidently.

## Section 13 – Disposal consideration

**Waste Treatment:** Recycle or dispose of in accordance with government, state & local regulations

**Attention for Waste Treatment:** Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling.

## Section 14 – Transport information

UN NO.	UN3480 UN3481
Proper Shipping Name	UN3480 Lithium Ion Batteries UN3481 Lithium Ion Batteries Packed With Equipment UN3481 Lithium Ion Batteries Contained In Equipment
Label for conveyance	Lithium Battery Label Class 9 Hazard Label Cargo aircraft Only Label

The dangerous goods regulations require that each battery design be subject to tests contained in UNITEDNATIONS the "Manual of Test and Criteria" (ST/SG/AC.10/11/Rev.7) Section 38.3. Report No.: S03A21030153U01001

The package of battery should be complied with the requirements of Packing Instruction 965/966/967 of IATA DGR 64th Edition for transportation.

The package of battery should be complied with the requirements Special Provisions 188 of IMDG-CODE (41.22).

## Section 15 – Regulation information

**Regulatory information:** Recommendations on the transport of dangerous goods-model Regulations 22nd or 22nd, IATA dangerous goods regulations 64th, international Maritime Dangerous Goods Code (41-22), European Agreement concerning the International Carriage of Dangerous Goods by Road (2023), Regulations concerning the International Carriage of Dangerous Goods by Rail (2023)

## Section 16 – Other information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export controlled information.