GREENCREATIVE

Safety Data Sheet (SDS)

Version: 2021

Prepared according to EEC Directive 93/112/EC

Product Name: Emergency power supply 5W EMERGENCY LED DRIVER (Lithium ion Cell 14.4V 850mAh 12. 24wh)
Model: 5EMDRIVER

Section 1- Chemical Product

Product Identification: Lithium ion Cell
Model No.: 5EMDRIVER

Section 2 – Composition Information

Chemical Composition	Chemical Formula	CAS No.	Weight (%)
Cobalt lithium manganese nickel oxide	Co.Li.Mn.Ni.O	182442-95-1	30-45
Graphite Powder	$C_{24}X_{12}$	7782-42-5	15-25
Lithium hexafluorophosphate	$LiPF_6$	21324-40-3	1-3
Poly -vinylidene fluoride	(C2H2F2)n	24937-79-9	0.1-2
Aluminum foil	Al	7429-90-5	2-8
Copper foil	Cu	7440-50-8	5-10
Carbon black	C	1333-86-4	0.5-2
Steel, nickel and inert polymer	/	/	0.5-5
lead	Pb	7439-92-1	Not Detected
cadmium	Cd	7440-43-9	Not Detected
mercury	Hg	7439-97-6	Not Detected

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 Battery pack, Watt hour rate 12.24Wh, which belong to the Lithium-ion batteries (Including lithium ion polymer batteries)

Section 4 – First aid measures

Eye contact	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin contact	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. G et medical aid.
Inhalation	Remove from exposure and move to fresh air immediately. Use oxygen if available.
Ingestion	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician

Section 5 –Fire-fighting measures

Flash Point	N/A.
Auto-Ignition Temperature	N/A.
Extinguishing Media	Water, CO_2.
Special Fire-Fighting Procedures	Self-contained breathing apparatus.
Unusual Fire and Explosion Hazards	Cell may vent when subjected to excessive heat-exposing battery contents.
Hazardous Combustion Products	Carbon monoxide, carbon dioxide, lithium oxide fumes.

Section 6 – Accidental Release Measures

Steps to be Taken in case Material is Released or Spilled	If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.
Waste Disposal Method	It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil

Section 7 – Handling and storage

The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container. Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.

Precautions to be taken in handling and storing	Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.
Other Precautions	The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

Section 8 – Exposure controls/personal protection

Respiratory Protection	In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.
Ventilation	Not necessary under conditions of normal use.
Protective Gloves	Not necessary under conditions of normal use.
Other Protective Clothing or Equipment	Not necessary under conditions of normal use.
Personal Protection is recommended for venting battery	Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

Section 9 – Physical and chemical properties

Appearance	Square
Odour	If leaking, smells of medical ether.
pH	Not applicable as supplied.
Flash Point	Not applicable unless individual components
Flammability	Not applicable unless individual components exposed.
Relative density	Not applicable unless individual components exposed
Solubility (water)	Not applicable unless individual components exposed
Solubility (other)	Not applicable unless individual components exposed

Section 10 – Stability and reactivity

Stability: Product is stable under conditions described in Section 7.
Conditions to Avoid : Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge. Short circuit. Expose over a long period to humid conditions.
Materials to avoid: Oxidising agents, alkalis, water.
Hazardous Decomposition Products : Toxic Fumes, and may form peroxides.
Hazardous Polymerization : N/A.
If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

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

Mammalian effects: None known at present.
Eco-toxicity: None known at present.
Bioaccumulation potential: Slowly Bio-degradable.
Environmental fate: None known environmental hazards at present.

Section 13 – Disposal consideration

Do not incinerate, or subject cells to temperature in excess of 70°C, Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.

Section 14 – Transport information

Label for conveyance: Lithium Battery Mark
Packaging Group: N/A
S-I EmS No: F-A ,S-I
Marine pollutant: No
Proper Shipping name: Lithium ion batteries contained in equipment (Including lithium ion polymer batteries)
Hazard Classification: The goods shall be complied with the requirements of Section II of Packing Instructions 967 of 59th DGR Manual of IATA(2018 edition)or special provision 188 of IMDG CODE(Amdt. 38-16)2016 Edition, including the passing of the UN38.3 test.

Section 15 – Regulation information

Law information

《Dangerous Goods Regulations》

《Recommendations on the Transport of Dangerous Goods Model Regulations》

《International Maritime Dangerous Goods》

《Technical Instructions for the Safe Transport of Dangerous Goods》

《Classification and code of dangerous goods》

《Occupational Safety and Health Act》(OSHA)

《Toxic Substance Control Act》(TSCA)

《Consumer Product Safety Act》(CPSA)

《Federal Environmental Pollution Control Act》(FEPCA)

《The Oil Pollution Act》(OPA)

《Superfund Amendments and Reauthorization Act TitleIII (302/311/312/313)》(SARA)

《Resource Conservation and Recovery Act》(RCRA)

《Safety Drinking Water Act》(CWA)

《California Proposition 65》

《Code of Federal Regulations》(CFR)

In accordance with all Federal,State and local laws.

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.