

# SPECTRO-UV

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## MATERIAL SAFETY DATA SHEET

**Goods Name** : High drain rechargeable battery

**Model Name** : Spectro-UV 149828 3200mAh

**Applicant** : Spectro-UV

**Report Number** : KS2206S2493B04

**Issue Date** : July 04, 2022

**Written by:** Alan Vickers **Approved by:** Alan Vickers

**Spectro-UV**



# Material Safety Data Sheet

Report No.: KS2206S2493B04

\* The MSDS is prepared based on the information provided by client. The contents and formats of this MSDS are revised as per client's request.

## 1. Chemical and Enterprise Identification

**Product Name** High drain rechargeable battery (Spectro-UV 149828 3200mAh)

**Product description** Rating: 3.7Vd.c., 3200mAh, 11.84Wh  
Weight: Appr. 49.0g  
Dimensions: Max.:  $\phi$  18.2\*65.5 (mm)

**Trademark** N/A

### Details of the supplier of the Material safety data sheet

**Initial supplier identifier** Spectro-UV

**Address** 4 Dubon Court, Farmingdale NY 11735 USA

**Telephone** 866-230-7305

**Website** [www.spectro-uv.com](http://www.spectro-uv.com)

**E-mail** [sales@spectro-uv.com](mailto:sales@spectro-uv.com)

**Company Emergency Phone Number** 866-230-7305








# Material Safety Data Sheet

Report No.: KS2206S2493B04

## 2. Hazards identification

**Classification** LITHIUM ION BATTERIES  
**Hazard statement** No dangerous in normal use & without damage,




**Hazards caused by spilled internal cell materials and precautionary statements as following:**

Classification		Labeling				Hazard statement codes	
Hazard class	Hazard category	Pictogram		Signal word	Hazard statement		
		GHS	UN Model Regulations				
Aspiration hazard	2		Not required	Warning	May be harmful if swallowed and enters airways	H305	
Acute toxicity	3	Oral		Not required	Warning	Harmful if swallowed	H302
		Dermal				Harmful in contact with skin	H312
		Inhalation				Harmful if inhaled	H332
Skin corrosion/irritation	2		Not required	Warning	Causes skin irritation	H315	
Serious eye damage/eye irritation	2/2A		Not required	Warning	Causes serious eye irritation	H319	
Skin sensitization	1, 1A <sup>a</sup> , 1B <sup>a</sup>		Not required	Warning	May cause an allergic skin reaction	H317	



# Material Safety Data Sheet

Report No.: KS2206S2493B04

Skin corrosion/irritation	1 1A, 1B, 1C <sup>a</sup>			Danger	Causes severe skin burns and eye damage	H314
Serious eye damage/eye irritation	1		Not required	Danger	Causes serious eye damage	H318

**Note:**

a - categories may be applied where data are sufficient and where required by a competent authority.

### 3. Ingredients/Composition Information

Pure chemical  Mixture

Chemical name	CAS No.	Weight-%	Remark
Lithium Cobalt Oxide	12190-79-3	15 - 40	-
Graphite	7782-42-5	10 - 30	-
Carbon black	1333-86-4	5 - 10	-
Phosphate(1-), hexafluoro-, lithium	21324-40-3	10 - 30	-
Copper	7440-50-8	7 - 13	-
Aluminum foil	7429-90-5	5 - 10	-
Nickel	7440-02-0	1 - 5	-

### 4. First aid measures

The lithium ion batteries are not hazardous with eye and skin contact under normal circumstance. In case of internal hazardous substance leaking an hazardous substance, following measures should be taken if body parts contact with these substance:

**After Skin Contact:** In case of contact, immediately wash skin with soap and copious amounts of water.



# Material Safety Data Sheet

Report No.: KS2206S2493B04

**After Eye Contact:** In case of contact, flush eyes with clean water for 15 minutes while lifting eyelids. Get prompt medical attention.

**After Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

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

## 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-ion batteries.

Don't use warm or hot water. Don't use Halon type extinguishing material. Dry powder, sand and earth might be used.

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

## 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.



# Material Safety Data Sheet

Report No.: KS2206S2493B04

## 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.

## 8. Exposure control and 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.



# Material Safety Data Sheet

Report No.: KS2206S2493B04

## 9. Physical and chemical properties

**Appearance:** Cylinder

**Color:** Black

**Odors:** If leaking, smells of medical ether.

**pH:** Not applicable as supplied.

**Flash Point:** Not applicable unless individual components exposed.

**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.

## 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

## 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.



# Material Safety Data Sheet

Report No.: KS2206S2493B04

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.

## 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.

## 13. Waste Disposal

**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. The best way is recycling.

## 14. Transport Information

**UN No.** UN 3480, UN 3481

**Proper Shipping Name** Lithium ion batteries (Including lithium ion polymer batteries) or;  
Lithium ion batteries contained in equipment (Including lithium ion polymer batteries) or;  
Lithium ion batteries packed with equipment (Including lithium ion polymer batteries)

**Labels for Package** Class 9

<b>ICAO / IATA:</b>	Can be shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DGR Packing Instructions (PI) 965 Section IB, PI 966 Section II and PI 967 Section II appropriate of IATA DGR 63 <sup>rd</sup> (2022 Edition) for transportation.
<b>IMDG CODE:</b>	《International Maritime Dangerous Goods》 Code (IMDG Code 40-20) under Special Provision 188.





# Material Safety Data Sheet

Report No.: KS2206S2493B04

<b>ADR:</b>	European Agreement concerning the International Carriage of Dangerous Goods by Road » (ADR 2021) under Special Provision 188.
<b>RID:</b>	Regulations concerning the International Carriage of Dangerous Goods by Rail » (RID 2021) under Special Provision 188.
May be shipped without being declared as Class 9 dangerous goods, when conform to the requirements above.	
The dangerous goods regulations require that each battery design be subject to tests contained in Section 38.3 of the UN Manual of Tests and Criteria prior to being offered for transport.	

## 15. Regulatory Information

### Regulatory information

- «Dangerous Goods Regulations»
- «Recommendation 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 Title III (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 according with all Federal, State and local laws.



# Material Safety Data Sheet

Report No.: KS2206S2493B04

## 16. Other Information

**Reference:** National standard of People's Republic of China. (GB/T 6483-2008) Safety data sheet for chemical products-Content and order of sections, National standard of People's Republic of China. (GB/T 17519-2013) Guidance on the compilation of safety data sheet for chemical products.

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. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages. Users should read this file carefully, and use the batteries in correct method. Spectro-UV doesn't assume responsibility for any damage or loss because of misuse of batteries.

--End of Report--