Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

*
1 Identification

· **Other means of identification**

· **Trade name: VALO™ Cordless 400mAh Rechargeable Battery**

· **Article number:**
SDS 435-001.02R01, 1007761, 13679, 13680, 13871, 13872, 13872-P2, 13874, 13875, 14191, 14192, 14377, 5941-D, 5942-D, 5963, 5963-JP, 5972-D
· **Relevant identified uses of the substance or mixture and uses advised against**
RCR123A Rechargeable Lithium Iron Phosphate Battery
· **Application of the substance / the mixture** RCR123A Rechargeable Lithium Iron Phosphate Battery

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Manufactured by SHENZHEN RYDER ELECTRONICS CO., LTD for:
Ultradent Products, Inc.
505 W. Ultradent Drive (10200 S)
South Jordan, UT 84095-3942
USA
onlineordersupport@ultradent.com
(800) 552-5512

Ultradent Australia Pty Ltd.
Level 22/2 Market Street
Sydney NSW 2000
Australia
Email: info.anz@ultradent.com
Toll Free: 1-800-290929

· **Further information obtainable from:** Customer Service
· **Emergency telephone number:**
CHEMTREC (NORTH AMERICA) : +1 (800) 424-9300
(INTERNATIONAL) : +(703) 527-3887

2 Hazard(s) Identification

· **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonised System (GHS).

· **Label elements**
· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void

3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 1)

· **Dangerous components:**

7440-50-8	Copper Foil	≥10-<30%
7429-90-5	Aluminum Foil	≥0-<30%
	Flammable solids – Category 1, H228; Substances and mixtures which, in contact with water, emit flammable gases – Category 2, H261	
21324-40-3	Lithium Hexaflurophosphate	≥0-<10%
	Acute toxicity - oral – Category 3, H301; Acute toxicity - dermal – Category 2, H310	
1120-71-4	Propane Sultone (PS)	≥0.01-<10%
	Carcinogenicity – Category 1B, H350; Acute toxicity - oral – Category 4, H302; Acute toxicity - dermal – Category 4, H312	

· **SVHC**

1120-71-4	Propane Sultone (PS)

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

· **General information:** No special measures required.
· **After inhalation:**
If contents of an opened battery are inhaled, remove source of contamination or move victim to fresh air. Obtain medical advice.
· **After skin contact:**
If skin contact with contents of an open battery, remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
· **After eye contact:**
If eye contact with contents of an open battery occurs, flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
· **After swallowing:**
Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **For safety reasons unsuitable extinguishing agents:**
Carbon dioxide
Water
· **Special hazards arising from the substance or mixture**
Carbon monoxide (CO)
Carbon Dioxide
lithium oxide fumes
· **Protective equipment:** Wear self-contained respiratory protective device.
· **Additional information** Cell may vent when subjected to excessive heat-exposing battery contents.

(Contd. on page 3)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 2)

6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures**
Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
· **Environmental precautions:**
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 the soil.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
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 it in a steel can. The preferred response is to leave the area and allow the battery to coo and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.
Do not flush with water or aqueous cleansing agents
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

· **Handling:**
· **Precautions for safe handling:**
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. 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 charged the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery or immerse in liquids.
Use only in well ventilated areas.
Keep away from heat and direct sunlight.
Do not smoke.
Avoid damaging or rupturing battery.
· **Information about fire - and explosion protection:** No special measures required.
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Store away from oxidising agents.
· **Further information about storage conditions:**
See product labelling.
Store in cool, dry conditions in well - sealed receptacles.
· **Specific end use(s)** RCR123A Rechargeable Lithium Iron Phosphate Battery

8 Exposure controls and personal protection

· **Appropriate engineering controls** No further data; see section 7.

· **Ingredients with limit values that require monitoring at the workplace:**	
7440-50-8 Copper Foil	
WES	Long-term value: 1* 0.2** mg/m³ *dust & mists (as Cu) **fume

(Contd. on page 4)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 3)

7429-90-5 Aluminum Foil	
WES	Long-term value: 10* 5** mg/m³ *metal dust;**welding, pyro powders

· **Additional information:**
Personal Protection is recommended for venting battery: Respiratory protection, protective gloves, protective clothing and safety glasses with side shields.
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
· **Respiratory protection:** Not required under normal conditions.
· **Protection of hands:**
Not necessary under normal conditions,
Hand protection: Wear neoprene or natural rubber material gloves if handling an open or leaking battery.
· **Material of gloves**
The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**
Not necessary under normal conditions, Wear safety glasses if handling an open or leaking battery.
· **Body protection:** Not necessary under normal conditions,.

9 Physical and Chemical Properties

· **General Information**	
· **Appearance:**	
· **Form:**	Cylindrical Solid
· **Colour:**	Silver-coloured
· **Odour:**	If leaking, smells of medical ether.
· **Odour threshold:**	Not determined.
· **pH-value:**	Not applicable.
· **Change in condition**	
· **Melting point/freezing point:**	Undetermined.
· **Initial boiling point and boiling range:**	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability**	Contact with water liberates extremely flammable gases.
· **Decomposition temperature:**	Not determined.
· **Ignition temperature:**	Product is not selfigniting. 130□
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
· **Lower:**	Not determined.
· **Upper:**	Not determined.
· **Vapour pressure:**	Not applicable.
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapour density**	Not applicable.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with**	
· **water:**	Insoluble.

(Contd. on page 5)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 4)

· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
· **Dynamic:**	Not applicable.
· **Kinematic:**	Not applicable.
· **Other information**	
· **Particle characteristics**	Not determined.
· **Physical state**	Solid

10 Stability and Reactivity

· **Reactivity** The product is stable under normal conditions.
· **Thermal decomposition / conditions to be avoided:**
Heat above 70 C or incinerate. Derform. Mutilate. Crush. Disassemble. Overcharge. Short circuit. Expose over a long period to humid conditions.
· **Possibility of hazardous reactions:**
Danger of explosion.
Danger of bursting.
Contact with water releases flammable gases.
· **Conditions to avoid:**
(e.g. static discharge, shock or vibration)
Do not subject the rechargeable battery to mechanical shock.
Vibration encountered during transportation does not cause leakage, fire or explosion.
Do not disassemble, crush, short or install with incorrect polarity. Avoid mechanical or electrical abuse.
· **Incompatible materials:**
Oxidizing Agents
Halogenated hydrocarbons
Mineral Acids
Alkalis
Water
Strong Oxidizing Agents
· **Hazardous decomposition products:**
Toxic fumes if burned or exposed to fire.
May form peroxides

11 Toxicological Information

· **Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Oral	LD50	1,786-10,000 mg/kg
Dermal	LD50	973-5,000 mg/kg

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Risk of irritation occurs only if the cell is mechanically, thermally or electrically abused to the point of compromising the enclosure. If this occurs, irritation to the skin, eyes and respiratory tract may occur.
Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 5)

· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **Additional toxicological information:**
Irritating effects only occurs if battery ruptures. In the event of internal contents, vapour fumes may be irritating to the eyes and skin. Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to severe irritation, burning and dryness of the skin may occur. Target organs nerves, liver and kidneys.

12 Ecological Information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** Slowly bio-degradeable
· **Behaviour in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation**
Dispose of contents/container in accordance with international, federal, state, and local regulations.

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

14 Transport information

· **UN-Number**	
· **ADG, IMDG, IATA**	UN3480
· **UN proper shipping name**	3480 LITHIUM ION BATTERIES 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT
· **ADG**	3480 LITHIUM ION BATTERIES
· **IMDG, IATA**	LITHIUM ION BATTERIES

(Contd. on page 7)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 6)

· **Transport hazard class(es)**

· **ADG, IMDG, IATA**

· **Class**	9 Miscellaneous dangerous substances and articles.
· **Label**	9A
· **Packing group**	
· **ADG, IMDG, IATA**	not regulated
· **Environmental hazards:**	Not applicable.
· **Special precautions for user**	Warning: Miscellaneous dangerous substances and articles.
· **Hazard identification number (Kemler code):**	-
· **EMS Number:**	F-A,S-I
· **Stowage Category**	A
· **Stowage Code**	SW19 For batteries transported in accordance with SP 376 or SP 377 Category C, unless transported on a short international voyage.
· **Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADG**	
· **Limited quantities (LQ)**	0
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **Transport category**	2
· **Tunnel restriction code**	E
· **IMDG**	IMO-IMDG Code [special provision 188]
· **Limited quantities (LQ)**	0
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **IATA**	

(Contd. on page 8)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 7)

· **Remarks:**	Lithium iron phosphate batteries comply with all applicable shipping regulations as prescribed by industry and legal standards which include UN Recommendations on the Transport of Dangeroud Goods; IATA Dangerous Goods regulations and US DOT requiremens. Cell and Batteries have been tested to section 38.3 of the UN Recommendations on the Transport of Dangerous Good Manual of Tests and Criteria. All of the batteries listed in this Safety Data Sheet are less than 100 Whrs; therefore, air shipment of up to 2 batteries without equipment in a package can be shipped as "excepted" quantity and does not require being shipped as a fully regulated Class 9 Hazardous Material. If more than 2 batteries without equipment are being shipped in one package a fully regulated shipment and must meet the more stringent documentation , marking, and labeling requirements.
· **UN "Model Regulation":**	UN 3480 LITHIUM ION BATTERIES, 9

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
1120-71-4	Propane Sultone (PS)

· **Australian Inventory of Industrial Chemicals**	
	Activated Carbon
7440-50-8	Copper Foil
21324-40-3	Lithium Hexaflurophosphate
1120-71-4	Propane Sultone (PS)
24937-79-9	Poly Vinylidene Fluoride (PVDF)

· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**	
1120-71-4	Propane Sultone (PS)

· **Chemical safety assessment:** A chemical safety assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

(Contd. on page 9)

Safety Data Sheet
according to WHS Regulations

Date of issue: 28.08.2025 Revision: 28.08.2025

Trade name: VALO™ Cordless 400mAh Rechargeable Battery

(Contd. of page 8)

· **Relevant phrases from Section 3**
H228 Flammable solid.
H261 In contact with water releases flammable gases.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
H312 Harmful in contact with skin.
H350 May cause cancer.

· **Department issuing SDS:** Environmental, Health, and Safety
· **Contact:** Customer Service
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
Flammable solids – Category 1: Flammable solids – Category 1
Substances and mixtures which, in contact with water, emit flammable gases – Category 2: Substances and mixtures which in contact with water emit flammable gases – Category 2
Acute toxicity - oral – Category 3: Acute toxicity – Category 3
Acute toxicity - oral – Category 4: Acute toxicity – Category 4
Acute toxicity - dermal – Category 2: Acute toxicity – Category 2
Carcinogenicity – Category 1B: Carcinogenicity – Category 1B
· ***** Data compared to the previous version altered.**