

Batterie Lithium



According_to_Regulation_CLP14

Language:EN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

See page 1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : Provide power to a headlamp. For more details, refer to the instructions for the finished product.

Uses advised against : No data available. For more details, refer to the instructions for the finished product.

1.3. Details of the supplier of the safety data sheet

Supplier : Name: PETZL DISTRIBUTION
Street: ZI CROLLES
Postal code/City: 38920 CROLLES
Country: FRANCE
Telephone: +33 476 920 900
Website: <http://www.petzl.com>
E-mail: info.france@petzl.com

1.4. Emergency Telephone Number

United Kingdom: In England and Wales: dial 111 (NHS 111), In Scotland: dial 111 (NHS 24), In Northern Ireland: Contact your local GP or pharmacist during normal hours. During GP Out-of-Hours (www.gpoutofhours.hscni.net/): Belfast HSC Trust, (North & West) 028 9074 4447, (South & East) 028 9079 6220 South Eastern HSC Trust, (North Down & Ards) 028 9182 2344, (Lisburn & Downpatrick) 028 9260 2204, Dalriada Urgent Care (Northern Trust area) 028 2566 3500, Southern HSC Trust 028 3839 9201, Western Urgent Care 028 7186 5195

SECTION 2: HAZARDS IDENTIFICATION


2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Hazard statements (H)	
Pyr. Sol. 1	H250	Catches fire spontaneously if exposed to air.
Water-react. 2	H261	In contact with water releases flammable gases.
Ox. Sol. 3	H272	May intensify fire; oxidiser.
Acute Tox. 4	H302	Harmful if swallowed
Skin Corr. 1A	H314	Causes severe skin burns and eye damage.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335	May cause respiratory irritation
Carc. 2	H351	Suspected of causing cancer.
Repr. 1B	H360	May damage fertility or the unborn child.
STOT RE 1	H372	Causes damage to organs.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms	
Signal word	Danger
Product identifiers	-
Hazard Statements	H250 - Catches fire spontaneously if exposed to air. H261 - In contact with water releases flammable gases. H272 - May intensify fire; oxidiser. H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation H351 - Suspected of causing cancer. H360 - May damage fertility or the unborn child. H372 - Causes damage to organs. H411 - Toxic to aquatic life with long lasting effects.
Supplemental Hazard information (EU)	-
Precautionary Statements - General	-
Precautionary Statements - Prevention	P201 - Obtain special instructions before use. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P231+P232 - Handle under inert gas. Protect from moisture. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash your hands after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statements - Response	P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - IF exposed or concerned: Get medical advice/attention. P310 - Immediately call a POISON CENTER/doctor/...
Precautionary Statements - Storage	P370+P378 - In case of fire: Use... to extinguish.
Precautionary Statements - Disposal	P405 - Store locked up. P501 - Dispose of contents and container in accordance with applicable local regulations.

Contains: cobalt lithium dioxide, carbon, lithium hexafluorophosphate(1-), nickel

2.3. Other hazards

Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Substance	C (%)	Classification	Specific concentration limits	Note
cobalt lithium dioxide CAS N°:12190-79-3 EC N°:235-362-0 IDX N°:	20.0% ≤C≤ 60.0%	H360: May damage fertility or the unborn child.	-	-
carbon CAS N°:7440-44-0 EC N°:231-153-3 IDX N°:	10.0% ≤C≤ 30.0%	H319: Causes serious eye irritation H335: May cause respiratory irritation	-	-
diphenyl carbonate CAS N°:102-09-0 EC N°:203-005-8	10.0% ≤C≤ 25.0%	H302: Harmful if swallowed H411: Toxic to aquatic life with long lasting effects.	-	-

IDX N°:				
lithium hexafluorophosphate(1-) CAS N°:21324-40-3 EC N°:244-334-7 IDX N°:	2.0% ≤C≤ 20.0%	H301: Toxic if swallowed. H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage. H372: Causes damage to organs.	-	-
lithium nitrate CAS N°:7790-69-4 EC N°:232-218-9 IDX N°:	1.0% ≤C≤ 5.0%	H272: May intensify fire; oxidiser. H302: Harmful if swallowed H319: Causes serious eye irritation	-	-
nickel CAS N°:7440-02-0 EC N°:231-111-4 IDX N°:028-002-00-7	0.5% ≤C≤ 5.0%	H317: May cause an allergic skin reaction. H351: Suspected of causing cancer. H372: Causes damage to organs.	-	-
Carbonic acid, ethyl methyl ester CAS N°:623-53-0 EC N°: IDX N°:	C≤ 3.0%	H226: Flammable liquid and vapour. H315: Causes skin irritation. H319: Causes serious eye irritation H335: May cause respiratory irritation	-	-

3.2. Mixtures

The mixture does not contain any substances classified as Substances of Very High Concern (SVHC) by the European CHemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>.

3.3. Remark

Text phrases and H- EUH-: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information	:	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Do not leave affected person unattended. Keep affected person warm, still and covered.
Following inhalation	:	Remove person to fresh air and keep comfortable for breathing. If the victim is unconscious but breathing normally, place her in recovery position and seek medical advice. No resuscitation mouth-to-mouth or mouth-to-nose. Ambu use a mask or respirator.
Following skin contact	:	IF ON SKIN: Immerse in cool water/wrap in wet bandages. Brush off loose particles from skin. Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, consult a physician. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.
Following eye contact	:	Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Following ingestion	:	Never give anything by mouth to an unconscious person or a person with cramps. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If swallowed: Call a POISON CENTER or physician if you feel unwell.
Self-protection of the first aider	:	First aider: Pay attention to self-protection!

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor : Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing agent suitable for local conditions and the surrounding environment.
Such as dry powder, CO₂.

Unsuitable extinguishing media : Water jet.

5.2. Special hazards arising from the substance or mixture

- Special hazards arising from the substance or mixture.
- Battery may burst and release hazardous decomposition products when exposed to a fire situation. Lithium ion batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature(>150°C (302°F)), when damaged or abused (e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.

5.3. Advice for firefighters

Special protective equipment for firefighters

- Wear self-contained respirator. Wear fully protective impervious suit.

5.4. Additional information

Not available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- Use personal protection equipment.
- Remove persons to safety.
- Provide adequate ventilation.
- Use appropriate respiratory protection.

6.2. Environmental precautions

- Ensure that waste is collected and contained.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- Avoid release to the environment.
- Cover drains.
- Ensure all waste water is collected and treated via a waste water treatment plant.
- Do not allow to enter into soil/subsoil.
- Do not allow to enter into surface water or drains.
- Retain contaminated washing water and dispose it.

6.3. Methods and material for containment and cleaning up

- Treat the recovered material as prescribed in the section on waste disposal.
- Collect in closed and suitable containers for disposal.
- Clean contaminated objects and areas thoroughly observing environmental regulations.
- Ventilate affected area.
- Collect spillage.

6.4. Reference to other sections

- Safe handling: see section 7.
- Disposal: see section 13.
- Personal protection equipment: see section 8.

6.5. Additional information

Not available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Avoid exposure - obtain special instructions before use.
- Use only outdoors or in a well-ventilated area.

PROTECTIVE MEASURES

- Avoid contact with skin, eyes and clothes.
- Use only in well-ventilated areas.
- If local exhaust ventilation is not possible or not enough, the entire work area must be ventilated by technical means.
- Do not eat, drink or smoke when using this product.
- Wear personal protective clothing (see section 8).
- Only allow access to authorised staff.
- Do not put any product-impregnated cleaning rags into your trouser pockets.
- Provide adequate ventilation as well as local exhaustion at critical locations.
- Sewers and ducts must be protected against the entry of the product.
- Provide for retaining containers, eg. floor pan without outflow.
- Dust should be exhausted directly at the point of origin.
- Avoid breathing dust.

Advices on general occupational hygiene

- Provide eye shower and label its location conspicuously
- Wash hands before breaks and after work.
- Remove contaminated, saturated clothing immediately.
- Street clothing should be stored separately from work clothing.
- Wash contaminated clothing before reuse.
- Work in well ventilated zones or use proper respiratory protection.

7.2. Conditions for safe storage, including any incompatibilities

- Keep container tightly closed in a dry, cool, and well-ventilated place.
- Keep container in upright position in order to prevent leakage.

Requirements for storage rooms and vessels

- Ensure adequate ventilation of the storage area.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Store in a closed container.
- Store locked up.
- Use isolated drainage to prevent discharge to soil.

Advice on joint storage

- Keep away from food, drink and animal feedingstuffs.
- Do not allow contact with air.
- Keep away from clothing and other combustible materials.
- Keep only in the original container in a cool, well-ventilated place, away from highly flammable substances.
- Do not allow contact with water.
- Handle under inert gas. Protect from moisture.

7.3. Specific end uses

- Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Not available

8.2. Exposure controls

Appropriate engineering controls

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.

Personal protection equipment



Eye/face protection	:	Suitable eye protection: Wear safety goggles or eye protection combined with respiratory protection.
Skin protection	:	Hand protection: Wear appropriate protective gloves to reduce skin contact. Body protection: Working environment required, wear suitable protective clothing to minimize contact with skin. The type of protective equipment must be according to the concentration and the content of certain hazardous substances in the workplace.
Respiratory protection	:	Suitable respiratory protection apparatus: Wear suitable protective mask in order to reduce the respiratory system. A large number of leakage, wear chemical protective clothing, including self-contained breathing apparatus.

8.3. Additional information

Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	White And Gray
Odour:	Not available
Odour threshold:	Not available
pH:	Not available
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	Not available
Evaporation rate:	Not available
Flammability:	Not available
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	Not available
Solubility(ies):	Not available
Partition coefficient: n-octanol/water (Log KOC):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Explosive properties:	Not available
Oxidising properties:	Not available

9.2. Other safety information

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Not available

10.4. Conditions to avoid

Flames, sparks, and other sources of ignition, , incompatible materials.

10.5. Incompatible materials

Oxidizing agents, acid, base.

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, lithium oxide fumes.

10.7. Additional information

Not available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Acute oral toxicity

Data for mixture

Not available

Substances

carbon (CAS: 7440-44-0)

Species : Rat
Sex : Not available
Guideline : Not available

Subendpoint	Operator	Value	Unit
LD50	>	10000	mg/kg

Conclusion : Not available

11.2. Acute skin toxicity

Data for mixture

Not available

Substances

Not available

11.3. Acute inhalation toxicity

Data for mixture

Not available

Substances

Not available

11.4. Skin corrosion

Data for mixture

The product is classified Skin Corr. 1A according to the referenced regulation.
Causes severe skin burns and eye damage.

Substances

Not available

11.5. Eye damage

Data for mixture

The product is not classified.

Substances

Not available

11.6. Skin sensitisation

Data for mixture

The product is classified Skin Sens. 1 according to the referenced regulation.

May cause an allergic skin reaction.

Substances

Not available

11.7. STOT SE

Data for mixture

The product is classified STOT RE 1 according to the referenced regulation.

Causes damage to organs through prolonged or repeated exposure.

Substances

Not available

11.8. STOT RE

Data for mixture

The product is classified STOT SE 3_H335 according to the referenced regulation.

May cause respiratory irritation.

Substances

Not available

11.9. Carcinogenicity

Data for mixture

The product is classified Carc. 2 according to the referenced regulation.

Suspected of causing cancer.

Substances

Not available

11.10. Reproductive and Developmental Toxicity

Data for mixture

The product is classified Repr. 1B according to the referenced regulation.

May damage fertility or the unborn child.

Substances

Not available

11.11. In vitro genotoxicity

Data for mixture

The product is not classified.

Substances

Not available

11.12. Respiratory sensitisation

Data for mixture

The product is not classified.

Substances

Not available

11.13. Additional information

Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Not available

12.2. Persistence and degradability

Not available

12.3. Bioaccumulative potential

Not available

12.4. Mobility in soil

Not available

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

12.7. Additional ecotoxicological information

Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

- The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste treatment options





- Waste requiring special supervision.
- Dispose of waste according to applicable legislation.
- Delivery to an approved waste disposal company.
- Non-contaminated packages must be recycled or disposed of.
- Contaminated packing must be completely emptied and can be reused after proper cleaning.
- Packing which cannot be properly cleaned must be disposed of.
- Handle contaminated packages in the same way as the substance itself.
- Dispose of waste according to applicable legislation.

Remark

- For recycling, contact manufacturer.
- Collect the waste separately.
- Consult the appropriate authorities about waste disposal.
- Do not mix with other wastes.
- The waste is to be kept separate from other types of waste until its disposal.
- Concerning the waste it has to be checked, whether a transport authorisation is required.

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI/IATA-DGR)
14.1. UN number	3480 / 3481	3480 / 3481	3480 / 3481	3480 / 3481

14.2. UN proper shipping name	LITHIUM ION BATTERIES (including lithium ion polymer batteries) / LITHIUM-IONEN-BATTERIEN, die in Geräten enthalten sind, oder LITHIUM-IONEN-BATTERIEN, die mit Geräten verpackt sind (einschließlich Lithium-Ionen-Polymer-Batterien)	LITHIUM ION BATTERIES (including lithium ion polymer batteries) / LITHIUM-IONEN-BATTERIEN, die in Geräten enthalten sind, oder LITHIUM-IONEN-BATTERIEN, die mit Geräten verpackt sind (einschließlich Lithium-Ionen-Polymer-Batterien)	LITHIUM ION BATTERIES (including lithium ion polymer batteries) / LITHIUM-IONEN-BATTERIEN, die in Geräten enthalten sind, oder LITHIUM-IONEN-BATTERIEN, die mit Geräten verpackt sind (einschließlich Lithium-Ionen-Polymer-Batterien)	LITHIUM ION BATTERIES (including lithium ion polymer batteries) / LITHIUM-IONEN-BATTERIEN, die in Geräten enthalten sind, oder LITHIUM-IONEN-BATTERIEN, die mit Geräten verpackt sind (einschließlich Lithium-Ionen-Polymer-Batterien)
14.3. Transport hazard class(es)				
Class or Division	9	9	9	9
Hazard label(s)				
14.4. Packing group	II	II	II	II

14.5. Environmental hazards

Marine pollutant: No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

14.8. Additional information

PETZL's product batteries have been successfully tested and comply with the UN Manual of Test and Criteria, Part III, subsection 38.3 Revision 3, Amendment 1 or any subsequent revision and amendment. Product batteries have been manufactured under a quality management program as specified in 2.9.4 of the UN Model Regulations.

PETZL product cells are rated at 20 Watt-hours or less and batteries are rated at 100 Watt- hours or less. PETZL products meet the requirements for transportation under:

- UN Model Regulations Special Provisions 188 and 230.
- International Civil Aviation Organization (ICAO) Technical Instructions and the International Air Transport Association (IATA) Dangerous Goods Regulations Packing Instructions:
 - 965 Section IB or Section II (UN3480, Lithium ion batteries at a state of charge (SOC) not exceeding 30%).
 - 966 Section II (UN3481, Lithium ion batteries packed with equipment).
 - 967 Section II (UN3481, Lithium ion batteries contained in equipment).
- International Maritime Organization (IMO) Special Provisions 188 and 230.
- European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) Special Provisions 188 and 230.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This SDS has been established in accordance with REACH regulation, including its amendments: REACH Regulation (EC) No 1907/2006.

This SDS has been established in accordance with CLP regulation, including its amendments: CLP Regulation EC No. 1272/2008.

EU legislation

Regulation: REACH : Annex XVII (Restrictions)

Substance	CAS	EC
nickel	7440-02-0	231-111-4

National regulations

Regulation: California proposition 65

Substance	CAS	EC
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15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

For this substance/mixture a chemical safety assessment has been elaborated.

For this mixture, the relevant data of the Substances' Chemical safety assessment are integrated in the sections of the SDS.

15.3. Additional information

Not available

SECTION 16: OTHER INFORMATION

16.1. Indication of changes

Not applicable (first edition of the MSDS).

16.2. Abbreviations and acronyms

CAS: Chemical Abstract Service Number.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods Code.

DPD Dangerous Preparation Directive.

UN number: United Nations number.

No EC: European Commission Number.

ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways.

ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail.

CLP: Classification, labeling and packaging.

VPvB: very persistent and very bioaccumulative substances.

16.3. Key literature references and sources for data

No data available.

16.4. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification of the mixture is in accordance with the evaluation method described in Regulation (EC) No 1272/2008.

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

H226	Flam. Liq. 3	Flammable liquid and vapour.
H250	Pyr. Sol. 1	Catches fire spontaneously if exposed to air.
H261	Water-react. 2	In contact with water releases flammable gases.
H272	Ox. Sol. 3	May intensify fire; oxidiser.
H301	Acute Tox. 3 ORAL	Toxic if swallowed.
H302	Acute Tox. 4 ORAL	Harmful if swallowed
H314	Skin Corr. 1A	Causes severe skin burns and eye damage.
H315	Skin Irrit. 2	Causes skin irritation.
H317	Skin Sens. 1	May cause an allergic skin reaction.
H318	Eye Dam. 1	Causes serious eye damage.
H319	Eye Irrit. 2	Causes serious eye irritation
H335	STOT SE 3 H335	May cause respiratory irritation
H351	Carc. 2	Suspected of causing cancer.
H360	Repr. 1B	May damage fertility or the unborn child.
H372	STOT RE 1	Causes damage to organs.
H411	Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.

16.6. Training advice

Refer to Sections 4, 5, 6, 7 and 8 of this safety data sheet.

16.7. Additional information

Not available

The information given in this Safety Data Sheet is based on our present knowledge and on european and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.