# TRIDONIC

Printing date 28.11.2022

Version number 1.0

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#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name: LiPo Akku (contained in equipment)

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

Application of the substance / the mixture Rechargeable lithium-ion cell

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

#### Manufacturer/Supplier:

**Tridonic GmbH & Co KG** Färbergasse 15 6850 Dornbirn Austria Tel: +43 5572 395-0 sales@tridonic.com

## Further information obtainable from:

Gerhard Radl gerhard.radl@tridonic.com

#### 1.4 Emergency telephone number:

+43 5572 395-0 Available during office hours: Mo - Fr 8.00 - 16.00 h

#### Call the national emergency number!

#### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

#### Additional information:

The product itself is declared as an article and is not subject to the provisions of classification in sense of the regulation (EC) No. 1272/2008.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 void Hazard pictograms void Signal word void Hazard statements void

#### Additional information:

The product itself is declared as an article and is not subject to the provisions of labeling in sense of the regulation (EC) No. 1272/2008.

#### 2.3 Other hazards

The cell ingredients are contained in a sealed enclosure. and harmless if the manufacturer's instructions are observed during use and handling.

Never use chargers that are not suitable for the type of battery with rechargeable batteries. The limits for maximum current load, charging and discharging voltage must be strictly adhered to! Do not short-circuit.

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Do not damage mechanically (pierce, deform, disassemble, etc.). Do not heat or burn above the permissible temperature. Keep batteries away from small children. Always store batteries in a dry and cool place.

Lithium-Ion Cells are safe to use when used properly and within the parameters specified by the manufacturer. Incorrect handling or circumstances resulting in improper operation may result in leakage of battery contents and decomposition products, resulting in severe reactions hazardous to health and the environment. In principle, contact with leaked battery components can pose a risk to health and the environment. Sufficient body and respiratory protection is therefore required in contact with conspicuous batteries (leakage of contents, deformation, discoloration, dents, etc.). Lithium-ion batteries can react very violently in combination with fire, for example. Battery components with considerable energy can be emitted.

As with other batteries, lithium batteries can continue to be a source of danger even when they are supposedly discharged.

**Results of PBT and vPvB assessment PBT:** Not applicable. **vPvB:** Not applicable.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Description:

Rechargeable lithium-ion batteries are articles from which no substance is released when used properly. Residual components: Aluminium, nickel, copper and inert materials

	Complex Lithium Nickel Oxide.	20 – 50%
	Similar chemical properties to Lithium Nickel Cobalt Oxide (CAS: 113066-89-0)	
	<ul> <li>Resp. Sens. 1, H334; Carc. 1A, H350; STOT RE 1, H372</li> <li>Skin Sens. 1, H317</li> </ul>	
CAS: 7782-42-5	Graphite	10 – 30%
EINECS: 231-955-3	substance with a Community workplace exposure limit	
	Organic Electrolyte Solvent	10 – 20%
	Similar chemical properties to Ethylene carbonate (CAS: 96-49-1)	
	< Eye Dam. 1, H318	
CAS: 21324-40-3	Lithiumhexafluorophosphat(1-)	1 – 3%
EINECS: 244-334-7	🛞 Acute Tox. 3, H301	
	🕉 STOT RE 1, H372	
	Skin Corr. 1A, H314	
CAS: 7429-90-5	aluminium	> 0.1%
EINECS: 231-072-3	substance with a Community workplace exposure limit	
RTECS: BD 0330000		

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CAS: 7440-02-0	nickel	> 0.1%
EINECS: 231-111-4 Index number: 028-002-00-7	<ul> <li>Carc. 2, H351; STOT RE 1, H372</li> <li>Skin Sens. 1, H317</li> </ul>	
CAS: 7440-50-8 EINECS: 231-159-6 RTECS: GL 5325000	copper substance with a Community workplace exposure limit	> 0.1%

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

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

#### **General information:**

In normal cases no specific measures needed.

It always applies:

In case of discomfort or doubt, seek medical advice.

If unconscious, use a stable lateral position and do not administer anything through mouth.

The following measures apply to contact with the contents of a damaged battery:

#### After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

#### After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Take off contaminated clothing and wash it before reuse.

Seek medical treatment in case of complaints.

#### After eye contact:

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an ophthalmologist or eye clinic immediately.

#### After swallowing:

Rinse mouth thoroughly with cold water. Do not induce vomiting. If the patient is fully conscious, give one or two glass of water to drink. Get medical attention immediately.

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

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Depending on the condition of the patients, the doctor must assess the symptoms and the overall general condition.

#### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

#### Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

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5.2 Special hazards arising from the substance or mixture Batteries may burst at high temperatures, which may result in flammable, toxic and/or corrosive vapours. May form hydrofluoric acid if the electrolyte comes into contact with water. In case of fire, the following can be released: COx Hydrogen fluoride (HF)  $PF_6$ Explosion hazard at temperatures > 150 °C. 5.3 Advice for firefighters **Protective equipment:** Wear self-contained respiratory protective device.

Wear fully protective suit. Additional information Remove container from fire, if possible without risk.

Cool endangered receptacles with water spray.

Ensure good ventilation.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Restricted access to the affected area until cleaning work is completed.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid skin and eye contact with damaged batteries.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

#### 6.3 Methods and material for containment and cleaning up:

Cover leaked material with inert absorbent material (sand or soil) and dispose of in suitable containers. Clean again.

#### 6.4 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.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

In any case, carefully observe the warnings on batteries and the instructions for use of appliances and other applications.

Only use the recommended battery types.

Use only approved chargers and procedures. Improperly charging a cell or battery may cause the cell or battery to flame or damage.

Do not short-circuit a battery. A short circuit can result in over-heating of the terminals and provide an ianition source.

More than a momentary short circuit will generally reduce the cell or battery service life and can lead to ignition of surrounding materials or materials within the cell or battery if the seal integrity is damaged.

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Extended short-circuiting creates high temperature in the cell and at the terminals. Physical contact to high temperatures can cause skin burns. In addition, extended short-circuit may cause the cell or battery to flame.

Avoid reversing cell polarity within a battery assembly. Reversing cell polarity may cause the cell or battery to flame or to emit gases.

Avoid to use old and new cells or cells of different sizes; different chemistry or types in the same battery assembly

Observe protective measures and safety instructions.

#### Information about fire - and explosion protection:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## 7.2 Conditions for safe storage, including any incompatibilities

#### Storage:

#### Requirements to be met by storerooms and receptacles:

Store in dry conditions.

Store in a cool location.

Protect from heat and direct sunlight.

Store in accordance with local/regional/national/international regulations.

#### Information about storage in one common storage facility:

Store away from oxidising agents.

Do not store together with acids.

#### Further information about storage conditions:

Recharge at regular intervals during prolonged storage.

Store in original container.

#### Recommended storage temperature: room temperature

Storage class: 11

7.3 Specific end use(s) No further relevant information available.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Lithium-ion cells are products (articles) from which no substances are released under normal and reasonably foreseeable conditions of use.

#### Ingredients with limit values that require monitoring at the workplace:

CAS: 7782-42-5 G	CAS: 7782-42-5 Graphite		
MAK (Austria)	Short-term value: 10 A mg/m³ Long-term value: 5 A mg/m³ (Alveolarstaub mit <1%Quartz)		
AGW (Germany)	Long-term value: 1.25* 10** mg/m³ 2(II);*alveolengängig**einatembar; AGS, DFG, Y		
LEP (Spain)	Long-term value: 2 mg/m³ polvo, fracción respirable; d		
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VLEP (France)	Long-term value: 2 mg/m <sup>3</sup> pour la fraction alvéolaire	
TWA (Italy)	Long-term value: 2 mg/m³ Tutte le forme, escluso le fibre di grafite (j)	
CAS: 21324-40-3 Li	thiumhexafluorophosphat(1-)	
AGW (Germany)	Long-term value: 0.2 E mg/m³ 1(I);Y, 10, DFG, als Li	
CAS: 7429-90-5 alu	minium	
MAK (Austria)	Short-term value: 20 E 10 A mg/m³ Long-term value: 10 E 5 A mg/m³ (als Metall)	
AGW (Germany)	Long-term value: 1.25* 10** mg/m³ 2(II);*alveolengängig**einatembar; AGS, DFG, Y	
LEP (Spain)	Long-term value: 1 mg/m³ d, fracción respirable	
VLEP (France)	Long-term value: 5* 10** mg/m³ *pulvérulent **métal	
WEL (Great Britain)	Long-term value: 10* 4** mg/m³ *inhalable dust **respirable dust	
TWA (Italy)	Long-term value: 1 mg/m³ A4, (j); metallico e composti insolubili	
WGW (Netherland)	Long-term value: 0.05* mg/m³ *Metaal en onoplosbare verb., inadembaar (privaat)	
CAS: 7440-02-0 nic	kel	
MAK (Austria)	siehe Anhang III A 1	
TRK (Austria)	Short-term value: 2E; 0.2E* mg/m³ Long-term value: 0.5E; 0.05E* mg/m³ Stäube; *einatembare Tröpfchen; als Ni	
AGW (Germany)	Long-term value: 0.006A; 0.030E* mg/m³ 8(II);AGS, 24, Sh, Y, 10*, 31*	
LEP (Spain)	Long-term value: 1 mg/m³ Sen, r	
VLEP (France)	Long-term value: 1 mg/m³ C2	
WEL (Great Britain)	Long-term value: 0.5 mg/m³ as Ni; Sk; Carc	
TWA (Italy)	Long-term value: 1.5 mg/m³ A5, (i)	
CAS: 7440-50-8 cop	pper	
MAK (Austria)	Short-term value: 4E; 0.4A* mg/m³ Long-term value: 1E; 0.1A* mg/m³	
	als Cu berechnet; *als Rauch	(Contd. on page

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MAK (Germany)	Long-term value: 0.01 A mg/m³ als Cu	
LEP (Spain)	Long-term value: 0.01 mg/m³ fracción resp., d	
VLEP (France)	Short-term value: 2** mg/m³ Long-term value: 0.2* 1** mg/m³ *fumées **poussières, en Cu	
WEL (Great Britain)	Short-term value: 2** mg/m³ Long-term value: 0.2* 1** mg/m³ *fume **dusts and mists (as Cu)	
TWA (Italy)	Long-term value: 0.2* 1* mg/m³ *fumi; **polveri e nebbie	
WGW (Netherland)	Long-term value: 0.1 mg/m³ inhaleerbaar	
<b>Regulatory information</b> MAK (Austria): GKV 2020, 156. Verordnung, 09.04.2021, Teil II		
AGW (Germany): TRGS 900 LEP (Spain): Límites de exposición profesional para agentes químicos		
TWA (Italy): Valori L	-	
WEL (Great Britain):	: EH40/2020	

WGW (Netherland): Grenswaarden gezondheidsschadelijke stoffen

TRK (Austria): GKV 2020, 156. Verordnung, 09.04.2021, Teil II

MAK (Germany): MAK- und BAT-Liste

## DNELs

CAS	S: '	7782	2-42-5	Graph	ite	

Oral	Long-term exposure - systemic effects	813 mg/kg bw/d (consumer)
Inhalative	Long-term exposure - systemic effects	1.2 mg/m³ (workers)
	Long-term exposure - local effects	0.3 mg/m³ (consumer)
		1.2 mg/m³ (workers)
CAS: 7429	9-90-5 aluminium	
Oral	Long-term exposure - systemic effects	7.9 mg/kg bw/d (consumer)
Inhalative	Long-term exposure - systemic effects	3.72 mg/m³ (workers)
	Long-term exposure - local effects	3.72 mg/m³ (workers)
CAS: 7440	0-02-0 nickel	
Oral	Long-term exposure - systemic effects	0.011 mg/kg bw/d (consumer)
	short-term exposure - systemic effects	0.37 mg/kg bw (consumer)
Dermal	Long-term exposure - local effects	0.035 mg/cm² (consumer)
		0.035 mg/cm² (workers)
Inhalative	Long-term exposure - systemic effects	0.00006 mg/m³ (consumer)

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	l ong torra	avpaqura local affacta	$0.05 \text{ mg/m}^3$ (workers)
	Long-term	exposure - local effects	0.00006 mg/m <sup>3</sup> (consumer)
			0.05 mg/m³ (workers)
	short-term	exposure - local effects	0.8 mg/m³ (consumer)
			11.9 mg/m³ (workers)
	0-50-8 сор		
Oral	U U		0.041 mg/kg bw/d (consumer)
Dermal	Long-term	exposure - systemic effects	137 mg/kg bw/d (consumer)
			137 mg/kg bw/d (workers)
	short-term	exposure - systemic effects	273 mg/kg bw (consumer)
			273 mg/kg bw (workers)
Inhalative	Long-term	exposure - local effects	1 mg/m³ (consumer)
			1 mg/m³ (workers)
	short-term	exposure - local effects	1 mg/m³ (consumer)
			1 mg/m³ (workers)
PNECs			
CAS: 7440	0-02-0 nick	cel	
fresh wate	r	7.1 μg/l	
sea water		8.6 µg/l	
STP		0.33 mg/l	
sediment (	(fresh wate	r) 109 mg/kg dw	
sediment (	(sea water)	109 mg/kg dw	
soil		29.9 mg/kg dw	
oral		0.12 mg/kg food	
CAS: 7440	0-50-8 cop	per	
fresh wate	r	7.8 μg/l	
sea water		5.2 μg/l	
STP		0.23 mg/l	
sediment (	(fresh wate	r) 87 mg/kg dw	
sediment (	(sea water)	676 mg/kg dw	
soil		65 mg/kg dw	
Ingredien	ts with bio	logical limit values:	
CAS: 7429	9-90-5 alur	ninium	
BGW (Gei	Un	μg/g Kreatinin tersuchungsmaterial: Urin phennahmezeitpunkt: bei I	Langzeitexposition: am Schichtende nach mehrere
	vor	rangegangenen Schichten rameter: Aluminium	
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**Regulatory information** BGW (Germany): TRGS 903 **Additional information:** The lists valid during the making were used as basis.

#### 8.2 Exposure controls

#### Appropriate engineering controls

No further data; see item 7.

Technical measures and the use of suitable working methods take priority over the use of personal protective equipment.

## Individual protection measures, such as personal protective equipment

#### **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

Avoid skin and eye contact with damaged batteries.

Avoid inhalation of spilled material.

Take off contaminated clothing and wash it before reuse.

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye wash bottles and emergency showers should be provided in the immediate area near the workplace.

Respiratory protection: Not required when handling undamaged batteries.

#### Hand protection

Not required when handling undamaged batteries.

Wear protective gloves made of chloroprene or rubber if batteries are damaged.

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### Eye/face protection

Not required when handling undamaged batteries.

Wear protective goggles if batteries are damaged.

Body protection: Not required when handling undamaged batteries.

Environmental exposure controls Do not allow to enter sewers/ surface or ground water.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

General Information	
Physical state	Solid
Colour:	Not determined.
Odour:	Odourless
Odour threshold:	No information available.

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Melting point/freezing point:	No information available.	(Conta: of page 9)
Boiling point or initial boiling point and boiling		
range	No information available.	
Flammability	Not determined.	
Lower and upper explosion limit		
Lower:	No information available.	
Upper:	No information available.	
Flash point:	Not applicable.	
Decomposition temperature:	No information available.	
pH	Not applicable.	
Viscosity:		
Kinematic viscosity	Not applicable.	
Dynamic:	Not applicable.	
Solubility		
water:	Insoluble.	
Partition coefficient n-octanol/water (log value)	No information available.	
Vapour pressure:	Not applicable.	
Density and/or relative density		
Density:	No information available.	
Vapour density	Not applicable.	
Particle characteristics	See item 3.	
9.2 Other information		
Appearance:		
Form:	Solid	
Important information on protection of health		
and environment, and on safety.		
Auto-ignition temperature:	No information available.	
Explosive properties:	No information available.	
Change in condition		
Softening point/range		
Oxidising properties	No information available.	
Evaporation rate	Not applicable.	
Information with regard to physical hazard	1	
classes	-	
Explosives	void	
Flammable gases	void	
Aerosols	void	
Oxidising gases	void	
Gases under pressure	void	
Flammable liquids	void	
Flammable solids	void	
Self-reactive substances and mixtures	void	
Pyrophoric liquids	void	
Pyrophoric solids	void	
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Self-heating substances and mixtures	void	
Substances and mixtures, which emit flam	nable	
gases in contact with water	void	
Oxidising liquids	void	
Oxidising solids	void	
Organic peroxides	void	
Corrosive to metals	void	
Desensitised explosives	void	

#### SECTION 10: Stability and reactivity

10.1 Reactivity No hazardous reactions known if stored and used as prescribed.

10.2 Chemical stability No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No further relevant information available.

#### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. temperature >\$

Do not expose the rechargeable battery to mechanical shock.

Do not disassemble, crush, short-circuit, or connect with incorrect polarity. Avoid mechanical or electrical abuse.

Avoid prolonged exposure to humid conditions.

10.5 Incompatible materials: No further relevant information available.

#### 10.6 Hazardous decomposition products:

No decomposition if used and stored according to specifications.

With open cells there is the possibility of the release of hydrofluoric acid and carbon monoxide.

#### **SECTION 11: Toxicological information**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Inhalation:** No probable route of exposure of the product itself. Inhalation of substances leaked from damaged batteries may irritate the respiratory tract and damage organs during prolonged or repeated exposure.

**Skin contact:** Contact with the undamaged battery does not present a hazard. Skin contact with damaged batteries may cause irritations/burns.

**Eye contact:** Contact with the undamaged battery does not constitute a hazard. Eye contact with spills from the damaged battery may cause irritations/burns.

**Ingestion:** No probable route of exposure of the product itself. Ingestion of spills may cause irritations/ burns to the esophagus and stomach. May be harmful if swallowed.

The product is declared as an article and is not subject to the CLP classification and labelling requirements. **Acute toxicity** Based on available data, the classification criteria are not met.

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## LD/LC50 values relevant for classification:

## ATE (Acute Toxicity Estimates)

Oral LD50 3,333 – 10,000 mg/kg

#### CAS: 7782-42-5 Graphite

Oral LD50 > 2,000 mg/kg (rat)

#### CAS: 7429-90-5 aluminium

Oral LD50 15,900 mg/kg (rat)

## Inhalative LC50/4h > 888 mg/m<sup>3</sup> (rat)

CAS: 7440-02-0 nickel

Oral LD50 > 9,000 mg/kg (rat)

#### CAS: 7440-50-8 copper

Oral LD50 > 2,000 mg/kg (rat)

Skin corrosion/irritation The electrolyte contained is considered irritating.

Serious eye damage/irritation The electrolyte contained is considered to be harmful to the eye.

Respiratory or skin sensitisation The electrolyte contained may cause allergic reactions.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity The product contains nickel.

**Reproductive toxicity** The product contains a lithium nickel oxide.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure The electrolyte contains nickel compounds.

Aspiration hazard Based on available data, the classification criteria are not met.

**Other information:** There is no danger from the undamaged battery.

#### 11.2 Information on other hazards

#### Endocrine disrupting properties

None of the ingredients is listed.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

**12.3 Bioaccumulative potential** No further relevant information available.

12.4 Mobility in soil No further relevant information available.

#### 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable.

vPvB: Not applicable.

#### 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

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#### 12.7 Other adverse effects Additional ecological information: General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system. Avoid release to the environment.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Dispose only through authorized companies in accordance with local regulations.

#### European waste catalogue

Notes: The European Waste Catalogue (EWC) classifies waste materials and categorises them according to what they are and how they were produced. This may cause other classifications. The final decision belongs to the last user.

16 06 05 other batteries and accumulators

#### Uncleaned packaging:

Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

#### **SECTION 14: Transport information**

14.1 UN number or ID number ADR/RID/ADN, IMDG, IATA 14.2 UN proper shipping name ADR/RID/ADN

IMDG, IATA

14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA



Class Label 14.4 Packing group ADR/RID/ADN, IMDG, IATA 14.5 Environmental hazards: 14.6 Special precautions for user UN3481

3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT

9 Miscellaneous dangerous substances and articles. 9A

not regulated Not applicable. Warning: Miscellaneous dangerous substances and articles.

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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.
14.7 Maritime transport in bulk according to IM	0
instruments	Not applicable.
Transport/Additional information:	<b>Special provision 188:</b> The carriage of Li-ion batteries is not subject to the provisions of ADR/RID/IMDG if the requirements set out therein are met.
ADR/RID/ADN	
Limited quantities (LQ)	0
Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
Transport category	2
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	0
Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
UN "Model Regulation":	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT

#### **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008

According to REACH, the product is an article and therefore not subject to classification and labelling according to CLP Regulation (EC) No. 1272/2008.

There is no obligation to prepare safety data sheets for articles. This data sheet describes the safety requirements and is based on the safety data sheet according to REACH Regulation (EC) No. 1907/2006.

#### Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed. REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 27

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

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#### **REGULATION (EU) 2019/1148**

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

#### Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

#### Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

#### Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

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

Does not contain SVHC substances  $\geq 0.1$  %. (Status: 11/2022)

Global Automotive Declarable Substance List (GADSL):		
CAS: 7440-02-0	nickel	D(FI)
CAS: 7440-50-8	copper	D/P(LR), D(LR)

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 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.

#### **Relevant phrases**

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H350 May cause cancer.

H351 Suspected of causing cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

#### Training hints

Regular training of staff involved in the transport of dangerous goods (in accordance with Chapter 1.3 ADR).

#### Department issuing SDS:

UmEnA GmbH http://umena.at Email: office@umena.at

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according to 1907/2006/EC

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#### 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 GHS: Globally Harmonised System of Classification and Labelling of Chemicals 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) DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) 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 Acute Tox. 3: Acute toxicity - Category 3 Skin Corr. 1A: Skin corrosion/irritation - Category 1A Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Resp. Sens. 1: Respiratory sensitisation - Category 1 Skin Sens. 1: Skin sensitisation - Category 1 Carc. 1A: Carcinogenicity - Category 1A Carc. 2: Carcinogenicity - Category 2 STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1 EU -

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