



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**Akkuschrauber AK 2025 9230B-2**

Revision date: 27/03/2025

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

#### 1.1. Product identifier

Akkuschrauber AK 2025 9230B-2

##### **Further trade names**

Type: 3,7 V; 2000 mAh; 7,4 Wh

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

##### **Use of the substance/mixture**

Li-ion batteries and accumulators

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

Company name:	HAZET – WERK	
	Hermann Zerver GmbH & Co. KG	
Street:	Güldenwerther Bahnhofstraße 25 - 29	
Place:	D-42857 Remscheid	
Telephone:	+49 (0) 21 91 / 7 92-0	Telefax: +49 (0) 21 91 / 7 92-375
E-mail:	info@hazet.de	
Internet:	www.hazet.de	

#### 1.4. Emergency telephone number:

+49 (0) 21 91 / 7 92-0 Only available during office hours.

#### **Further Information**

This battery pack is an article according to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010, and is not subject to the REACH regulation. The information contained in this safety data sheet contains valuable and critical information for the safe and proper use of the product. This SDS should be kept and made available to employees and other users of the product.

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### **Regulation (EC) No 1272/2008**

Carc. 2; H351  
Repr. 1B; H360FD  
Skin Irrit. 2; H315  
Eye Dam. 1; H318  
Skin Sens. 1; H317  
STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

Classification according to Regulation (EC) No 1272/2008 [CLP]: not applicable / not relevant

The product is: article (batteries and accumulators)

#### 2.2. Label elements

##### **Additional advice on labelling**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: not applicable / not relevant

The product is: article (batteries and accumulators)

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

Risk of explosion by shock, friction, fire or other sources of ignition. (Formation of: Gases/vapours, toxic) Do not open container by force. To avoid risks to man and the environment, comply with the instructions for use.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### **Chemical characterization**

The product is: article (batteries and accumulators)

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**Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
12325-84-7	Lithium nickel oxide			25 - 35 %
12190-79-3	Cobalt lithium dioxide			1 - 5 %
	235-362-0			
	Repr. 1B; H360FD			
554-12-1	methyl propionate			1 - 5 %
	209-060-4	607-027-00-2		
	Flam. Liq. 2, Acute Tox. 4; H225 H332			
21324-40-3	Lithium hexafluorophosphate(1-)			1 - 3 %
	244-334-7			
	Acute Tox. 3, Skin Corr. 1A, Eye Dam. 1, STOT RE 1; H301 H314 H318 H372			
114435-02-8	4-fluoro-1,3-dioxolan-2-one			1 - 3 %
	483-360-5			
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT RE 1; H302 H315 H319 H317 H372			
7440-02-0	nickel			0,1 - 1 %
	231-111-4	028-002-00-7	01-2119438727-29	
	Carc. 2, Skin Sens. 1, STOT RE 1, Aquatic Chronic 3; H351 H317 H372 H412			
554-13-2	lithium carbonate			1 - < 5 %
	209-062-5		01-2119516034-53	
	Acute Tox. 4, Eye Irrit. 2; H302 H319			
100-41-4	ethylbenzene			1 - < 5 %
	202-849-4	601-023-00-4		
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H225 H332 H373 H304 H412			
872-50-4	N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone			1 - < 5 %
	212-828-1	606-021-00-7	01-2119472430-46	
	Repr. 1B, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H360D H315 H319 H335			
7440-47-3	Chromium			< 1 %
	231-157-5		01-2119485652-31	

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
554-12-1	209-060-4	methyl propionate	1 - 5 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists)	
21324-40-3	244-334-7	Lithium hexafluorophosphate(1-)	1 - 3 %
		oral: ATE = 100 mg/kg	
114435-02-8	483-360-5	4-fluoro-1,3-dioxolan-2-one	1 - 3 %
		oral: LD50 = 500 mg/kg	
554-13-2	209-062-5	lithium carbonate	1 - < 5 %
		oral: LD50 = 525 mg/kg	



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**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
100-41-4	202-849-4	ethylbenzene	1 - < 5 %
		inhalation: LC50 = 17,8 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 15400 mg/kg; oral: LD50 = 3500 mg/kg	
872-50-4	212-828-1	N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone	1 - < 5 %
		STOT SE 3; H335: >= 10 - 100	

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

When in doubt or if symptoms are observed, get medical advice. The following notes refer to direct contact with the contents of the battery or the accumulator.

**After inhalation**

Provide fresh air. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Get medical advice/attention.

**After contact with skin**

Wash with plenty of water/soap. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

**After contact with eyes**

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

**After ingestion**

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician in any case!

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

No information available.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Water, Dry sand, Carbon dioxide (CO<sub>2</sub>), Nitrogen, Dry extinguishing powder, Foam.  
Co-ordinate fire-fighting measures to the fire surroundings.

**5.2. Special hazards arising from the substance or mixture**

Danger of bursting container. (Electrolyte: Highly flammable)  
In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide, Lithium oxide Vapour, @0503.B0500

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

**Additional information**

Suppress gases/vapours/mists with water spray jet. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.



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### SECTION 6: Accidental release measures

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

##### **General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Evacuate area.

##### **For non-emergency personnel**

Remove all sources of ignition. Remove persons to safety. Wear personal protection equipment.

##### **For emergency responders**

Wear personal protection equipment (refer to section 8).

#### **6.2. Environmental precautions**

Avoid release to the environment.

#### **6.3. Methods and material for containment and cleaning up**

##### **For containment**

Stop leak if safe to do so. Cover drains.

##### **For cleaning up**

Take up mechanically, placing in appropriate containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

Electrolyte:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

##### **Other information**

batteries and accumulators: Risk of explosion by shock, friction, fire or other sources of ignition.

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Handle with care - avoid bumps, friction and impact. Do not open container by force. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

Electrolyte: Handle under inert gas.

##### **Advice on protection against fire and explosion**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges.

##### **Advice on general occupational hygiene**

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

##### **Further information on handling**

To avoid risks to human health and the environment, comply with the instructions for use.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Store in a cool dry place. Provide adequate ventilation as well as local exhaust at critical locations. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### **Hints on joint storage**

Do not store together with: metals (including their alloys), Water, Strong acid, Strong alkali, halogenated hydrocarbons, Oxidising agent, strong.

##### **Further information on storage conditions**



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Protect against: Heat, UV-radiation/sunlight, moisture.  
Recommended storage temperature: at room temperature

## 7.3. Specific end use(s)

Li-ion batteries and accumulators

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
7429-90-5	Aluminium metal (Respirable Fraction)	-	1		TWA (8 h)	
1333-86-4	Carbon black (Inhalable Fraction)	-	3		TWA (8 h)	
7440-47-3	Chromium metal	-	2		TWA (8 h)	
-	Cobalt compounds (as Co)	-	0.02		TWA (8 h)	
7440-50-8	Copper, dusts and mists	-	1		TWA (8 h)	
7440-50-8	Copper, fume	-	0.2		TWA (8 h)	
100-41-4	Ethylbenzene	100	442		TWA (8 h)	
		200	884		STEL (15 min)	
7782-42-5	Graphite (all forms except fibres) (Respirable Fraction)	-	2		TWA (8 h)	
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	
		-	10		STEL (15 min)	
7440-02-0	Nickel (respirable fraction)	-	0,01		TWA (8 h)	
-	Nickel inorganic compounds (as Ni), inhalable fraction	-	0,05		TWA (8 h)	
872-50-4	n-Methyl-2-pyrrolidone	10	40		TWA (8 h)	
		20	80		STEL (15 min)	
1309-37-1	Rouge, respirable dust	-	4		TWA (8 h)	
1309-37-1	Rouge, total inhalable dust	-	10		TWA (8 h)	

#### Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
7440-02-0	Nickel	Ni	3 µg/L	Urine	After several consecutive working shifts
100-41-4	Ethyl benzene	Mandelic acid and phenylglyoxylic acid	0.7 g/g	Creatinine	End of shift at end of workweek
		Ethylbenzene	0	End-exhaled air	Not critical
872-50-4	N-Methyl-2-pyrrolidone	2-HMSI	20 mg/g	Creatinine	End of shift (measured morning after shift (8hrs))
		5-HNMP	70 mg/g	Creatinine	End of shift (measured 2-4hrs after the end of the shift)
7440-47-3	Chromium	Total chromium	25 µg/L	Urine	End of shift at end of workweek
		Total chromium increase during shift	10 µg/L	Urine	End of shift at end of workweek

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
872-50-4	N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone			
Worker DNEL, long-term		dermal	systemic	4,8 mg/kg bw/day

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## DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
DNEL type				
Worker DNEL, long-term		inhalation	systemic	14,4 mg/m <sup>3</sup>
1309-37-1	Diiron trioxide			
Worker DNEL, long-term		inhalation	local	3 mg/m <sup>3</sup>

## 8.2. Exposure controls



### Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

IF exposed: (Electrolyte): Use eye protection according to EN 166.

#### Hand protection

IF exposed: (Electrolyte): Wear suitable gloves tested to EN374.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

Usually no personal respiratory protection necessary.

Respiratory protection necessary at: IF exposed: (Electrolyte): insufficient ventilation, exceeding exposure limit values.

#### Thermal hazards

No information available.

#### Environmental exposure controls

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state:	solid
Colour:	According to product specification
Odour:	odourless
Odour threshold:	not applicable
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	Electrolyte: Highly flammable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined



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pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	practically insoluble
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	not determined
Relative vapour density:	not determined
Particle characteristics:	not determined

**9.2. Other information**

No information available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Heat / In case of fire: Danger of bursting container.

**10.4. Conditions to avoid**

Handle with care - avoid bumps, friction and impact. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Heat, UV-radiation/sunlight, moisture.

**10.5. Incompatible materials**

metals (including their alloys), Water, Strong acid, Strong alkali, halogenated hydrocarbons, Oxidising agent, strong.

**10.6. Hazardous decomposition products**In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide, Lithium oxide Vapour, Pyrolysis products, toxic**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

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

**ATE<sub>mix</sub> calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 50 mg/l; ATE (inhalation dust/mist) &gt; 12,5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
554-12-1	methyl propionate				
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
21324-40-3	Lithium hexafluorophosphate(1-)				
	oral	ATE 100 mg/kg			
114435-02-8	4-fluoro-1,3-dioxolan-2-one				
	oral	LD50 500 mg/kg	Rat	ECHA	OECD 423
554-13-2	lithium carbonate				
	oral	LD50 525 mg/kg	Rat	ECHA	



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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
100-41-4	ethylbenzene				
	oral	LD50 3500 mg/kg	Rat	Pre-supplier/manufaturer	
	dermal	LD50 15400 mg/kg	Rabbit	Pre-supplier/manufaturer	
	inhalation (4 h) vapour	LC50 17,8 mg/l	Rat	Pre-supplier/manufaturer	
	inhalation dust/mist	ATE 1,5 mg/l			

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye damage.

**Sensitising effects**

May cause an allergic skin reaction. (4-fluoro-1,3-dioxolan-2-one; nickel)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing cancer. (nickel)

May damage fertility. May damage the unborn child. (Cobalt lithium dioxide)

Germ cell mutagenicity: 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**

May cause damage to organs through prolonged or repeated exposure. (Lithium hexafluorophosphate(1-); 4-fluoro-1,3-dioxolan-2-one; nickel)

**Aspiration hazard**

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

**Information on likely routes of exposure**

Skin contact

Electrolyte: oral, Skin contact, Eye contact, Inhalation.

**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

**SECTION 12: Ecological information****12.1. Toxicity**

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

The product is not: Ecotoxic

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h][d]	Species	Source	Method



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h][d]	Species	Source	Method
100-41-4	ethylbenzene					
	Acute fish toxicity	LC50 4,2 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	Pre-supplier/manufacturer	OECD 203
	Acute algae toxicity	ErC50 3,6 mg/l	96 h	Pseudokirchneriella subcapitata	Pre-supplier/manufacturer	
	Acute crustacea toxicity	EC50 1,8 - 2,4 mg/l	48 h	Daphnia magna (Big water flea)	Pre-supplier/manufacturer	
	Crustacea toxicity	NOEC 0,96 mg/l	7 d	Ceriodaphnia dubia	Pre-supplier/manufacturer	
	Acute bacteria toxicity	EC50 600 mg/l ( )	0,5 h	Activated sludge	Pre-supplier/manufacturer	OECD 209

**12.2. Persistence and degradability**

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
100-41-4	ethylbenzene			
	OECD 310	70 - 80 %	28	Pre-supplier/manufacturer
	Readily biodegradable (according to OECD criteria).			
	OECD 301E	100 %	6	Pre-supplier/manufacturer
	Readily biodegradable (according to OECD criteria).			

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
872-50-4	N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone	-0,54

**BCF**

CAS No	Chemical name	BCF	Species	Source
100-41-4	ethylbenzene	1	Oncorhynchus kisutch	Pre-supplier/manufacturer

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment.



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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### Contaminated packaging

Dispose of waste according to applicable legislation.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

<b>14.1. UN number or ID number:</b>	UN 3481
<b>14.2. UN proper shipping name:</b>	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	-
Hazard label:	9A
Classification code:	M4
Special Provisions:	188 230 310 348 360 376 377 387 390 670
Limited quantity:	0
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	E

##### Other applicable information (land transport)

Land transport (ADR/RID): Special Provisions 188

#### Inland waterways transport (ADN)

<b>14.1. UN number or ID number:</b>	UN 3481
<b>14.2. UN proper shipping name:</b>	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	-
Hazard label:	9A
Classification code:	M4
Special Provisions:	188 230 310 348 360 376 377 387 390 670
Limited quantity:	0
Excepted quantity:	E0

##### Other applicable information (inland waterways transport)

Inland waterway craft (ADN): Special Provisions 188

#### Marine transport (IMDG)

<b>14.1. UN number or ID number:</b>	UN 3481
<b>14.2. UN proper shipping name:</b>	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	-
Hazard label:	9A
Marine pollutant:	-
Special Provisions:	188 230 310 348 360 376 377 384 387 390
Limited quantity:	0
Excepted quantity:	E0
EmS:	F-A, S-I

##### Other applicable information (marine transport)

Sea transport (IMDG): Special Provisions 188



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**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	UN 3481
<b>14.2. UN proper shipping name:</b>	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	-
Hazard label:	9
Special Provisions:	A48 A88 A99 A154 A181 A185 A213 A220
Limited quantity Passenger:	Forbidden
Passenger LQ:	Forbidden
Excepted quantity:	E0
IATA-packing instructions - Passenger:	967
IATA-max. quantity - Passenger:	5 kg
IATA-packing instructions - Cargo:	967
IATA-max. quantity - Cargo:	35 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Protect against: Heat, Condensation, Humidity.  
Handle with care - avoid bumps, friction and impact.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 27, Entry 30, Entry 40, Entry 71, Entry 72, Entry 75

Directive 2010/75/EU on industrial emissions: &lt; 15 %

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**Additional information**

There is no requirement for the product to be specially labelled according to EC directives or the corresponding national laws.

**National regulatory information**

Water hazard class (D): 3 - highly hazardous to water

**Additional information**

Observe in addition any national regulations!

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Abbreviations and acronyms**

Flam. Liq: Flammable liquid  
Acute Tox: Acute toxicity  
Asp. Tox: Aspiration hazard  
Skin Corr: Skin corrosion



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Skin Irrit: Skin irritation  
Eye Dam: Eye damage  
Eye Irrit: Eye irritation  
Skin Sens: Skin sensitisation  
Carc: Carcinogenicity  
Repr: Reproductive toxicity  
STOT SE: Specific target organ toxicity - single exposure  
STOT RE: Specific target organ toxicity - repeated exposure  
Aquatic Chronic: Chronic aquatic hazard  
CAS: Chemical Abstracts Service  
CLP: Classification, Labelling and Packaging  
EU: European Union  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
REACH: Registration, Evaluation and Authorization of Chemicals  
UN: United Nations  
PBT: Persistent, Bioaccumulative, Toxic  
SVHC: Substance of Very High Concern  
vPvB: very Persistent, very Bioaccumulative  
ATE: Acute Toxicity Estimates  
BCF: Bio-Concentration Factor  
DMEL: Derived Minimal Effect Level  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration  
VOC: Volatile Organic Compounds  
DIN: Deutsches Institut für Normung e.V. (German Institute for Standardization)  
EN: European Standard  
ISO: International Organization for Standardization  
IUCLID: International Uniform Chemical Information Database  
LC50: Lethal Concentration, 50 %  
LD50: Lethal Dose, 50 %  
LL50: Lethal Loading, 50 %  
OECD: Organisation for Economic Co-operation and Development  
EC50: Effective Concentration 50 %  
M-Faktor: Multiplication Factor  
EL50: Effect Loading, 50 %  
ErC50: Effective Concentration 50 %, growth rate  
M-Faktor: Multiplication Factor  
NOEC: No Observed Effect Concentration  
ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)  
ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
DGR: Dangerous Goods Regulations  
EmS: Emergency Schedules  
IATA: International Air Transport Association  
IBC: Intermediate Bulk Container  
ICAO: International Civil Aviation Organization  
IE: Industrial Emissions  
IMDG: International Maritime Code for Dangerous Goods  
LQ: Limited Quantity  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
MFAG: Medical First Aid Guide  
RID: Regulations concerning the International carriage of Dangerous goods by rail  
TI: Technical Instructions

### Key literature references and sources for data

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). (v.1.2, 2013)



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**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

Classification	Classification procedure
Carc. 2; H351	Calculation method
Repr. 1B; H360FD	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT RE 2; H373	Calculation method

**Relevant H and EUH statements (number and full text)**

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

This battery pack is an article according to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010, and is not subject to the REACH regulation. The information contained in this safety data sheet contains valuable and critical information for the safe and proper use of the product. This SDS should be kept and made available to employees and other users of the product.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*