



# Li-Ion Batteries >100 Wh

## Product Safety Information Sheet

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis

Issue date: 11/11/2024

Revision date: 11/11/2024

Supersedes: 17/04/2024

Version: 5.17

### SECTION 1: Identification

#### 1.1. GHS Product identifier

Product form	Article
Product name	Li-Ion Batteries >100 Wh
UN-No. (ADR)	3480
Product code	BU ET&A

#### 1.2. Other means of identification

Other means of identification	Hilti B 18 / 5.2 Li-Ion (01), Hilti B 22 / 5.2 Li-Ion (01), Hilti B 22 / 8.0 Li-Ion (01), Hilti B 36 / 3.0 Li-Ion (01), Hilti B 36 / 3.3 Li-Ion (01), Hilti B 36 / 3.9 Li-Ion (01), Hilti B 36 / 5.2 Li-Ion (01), Hilti B 36 / 6.0 Li-Ion (01), Hilti B 36 / 9.0 Li-Ion (01), Hilti B 22-110 Li-Ion (01), Hilti B22-170 Li-Ion (01), Hilti B22-195 Li-Ion (01), Hilti B22-255 Li-Ion (01), Hilti B22-290 Li-Ion (01)
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#### 1.3. Recommended use of the chemical and restrictions on use

Recommended uses and restrictions	For professional use only
Recommended use	Rechargeable Lithium Ion battery for power tools

#### 1.4. Supplier's details

<b>Supplier</b> Hilti (Philippines) Inc. 2256 Pasong Tamo Extension Edsa, Brgy. Magallanes PH 1224 Makati City Philippines T +632 784 7100, F +63 2 784 7100 <a href="mailto:customerservice.ph@hilti.com">customerservice.ph@hilti.com</a>	<b>Department issuing data specification sheet</b> Hilti AG Feldkircherstraße 100 FL 9494 Schaan Liechtenstein T +423 234 2111 <a href="mailto:product.compliance-power.tools@hilti.com">product.compliance-power.tools@hilti.com</a>
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#### 1.5. Emergency phone number

Emergency number	Emergency CONTACT (24-Hour-Number): GBK GmbH Global Regulatory Compliance +49 (0)6132-84463  +632 784 7100
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### SECTION 2: Hazard identification

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

##### Classification according to the United Nations GHS

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### Labelling according to the United Nations GHS

No labelling applicable

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### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification For the battery chemical materials are stored in a hermetically sealed metal case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use there is no physical danger of ignition or explosion and chemical danger of hazardous materials leakage.

It may cause heat generation or electrolyte leakage if battery terminals contact with other metals. Electrolyte is flammable. In case of electrolyte leakage move the battery from fire immediately.

However if exposed to a fire, added mechanical shocks, decomposed, added electric stress by miss-use, the gas release vent will be operated. The battery case will be broken at the extreme, hazardous materials may be released.

Moreover, if heated strongly by a surrounding fire, acrid gas may be emitted.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Comments

Lithium Ion rechargeable battery pack:

Name/Type	Energy content (Wh)
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Hilti B 18 / 5.2 Li-Ion (01)	112,00
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Hilti B 22 / 5.2 Li-Ion (01)	112,00
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Hilti B 22 / 8.0 Li-Ion (01)	171,08
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Hilti B 36 / 3.0 Li-Ion (01)	108,00
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Hilti B 36 / 3.3 Li-Ion (01)	118,80
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Hilti B 36 / 3.9 Li-Ion (01)	140,40
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Hilti B 36 / 5.2 Li-Ion (01)	187,20
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Hilti B 36 / 6.0 Li-Ion (01)	216,00
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Hilti B 36 / 9.0 Li-Ion (01)	316,80
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Hilti B 22-110 Li-Ion (01)	110,16
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Hilti B 22-170 Li-Ion (01)	170,65
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Hilti B 22-195 Li-Ion (01)	194,4
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Hilti B 22-255 Li-Ion (01)	255,96
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Hilti B 22-290 Li-Ion (01)	291,6
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This product contains a positive electrode (Lithium cobalt oxide (CAS-No. 12190-79-3)), a negative electrode (graphite (CAS-No. 7782-42-5)) and electrolyte (ethylene carbonate (CAS-No. 96-49-1), diethyl carbonate (CAS-No. 105-58-8) and lithium hexafluorophosphate (CAS-No. 21324-40-3)).

The physical form of the product, however, precludes exposure to workers under normal conditions of use.

This mixture does not contain any substances to be mentioned according to the applicable regulations

## SECTION 4: First-aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general

If the electrolyte is leaking out of the battery pack, the following measures have to be taken.

First-aid measures after inhalation

Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Potential adverse human health effects and symptoms	This product contains an organic electrolyte. If the electrolyte is leaking out of the battery pack, the following effects are known when getting into contact: Irritation: severely irritant to eyes. Irritation: may cause irritation to the respiratory system.

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media	Cool batteries and accumulators with water jet. In case of fire in the surroundings: Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media	No additional information available.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	Formation of toxic gases is possible during heating or in case of fire.
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### 5.3. Special protective actions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures	No flames, no sparks. Eliminate all sources of ignition. Isolate from fire, if possible, without unnecessary risk.
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#### 6.1.1. For non-emergency personnel

Protective equipment	Wear protective gloves. protective clothing. Safety goggles. Gas mask.
Emergency procedures	Evacuate unnecessary personnel. No flames, no sparks. Eliminate all sources of ignition. Isolate from fire, if possible, without unnecessary risk.

#### 6.1.2. For emergency responders

Protective equipment	Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and materials for containment and cleaning up

Methods for cleaning up	Take up liquid spill into absorbent material.
Other information	Dispose of materials or solid residues at an authorized site.



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### Personal protective equipment symbol(s)



### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state	Solid
Appearance	plastic case
Colour	red. Black.
Odour	odourless.
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Non flammable.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH	Not available
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50°C	Not available
Density	Not available
Relative density	Not available
Relative vapour density at 20°C	Not applicable
Solubility	Not available
Particle size	Not available

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

Explosive properties	Risk of explosion by shock, friction, fire or other sources of ignition
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Heating may cause a fire or explosion.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Water, humidity.

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### 10.5. Incompatible materials

Conductive materials, water, seawater, strong oxidizers and strong acids.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	This product contains an organic electrolyte. If the electrolyte is leaking out of the battery pack, the following effects are known when getting into contact: Irritation: severely irritant to eyes. Irritation: may cause irritation to the respiratory system.
Other information	When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified

### 12.2. Persistence and degradability

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Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

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Mobility in soil	No additional information available

### 12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available
Other information	Do not allow battery packs to penetrate the soil. The battery cell may corrode and electrolyte may leak.

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### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Refer to manufacturer/supplier for information on recovery/recycling.
Ecological information	Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
<b>14.1. UN number or ID number</b>			
UN 3480	UN 3480	UN 3480	UN 3480
<b>14.2. UN proper shipping name</b>			
LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	Lithium ion batteries	LITHIUM ION BATTERIES
<b>Transport document description</b>			
UN 3480 LITHIUM ION BATTERIES, 9, (E)	UN 3480 LITHIUM ION BATTERIES, 9	UN 3480 Lithium ion batteries, 9	UN 3480 LITHIUM ION BATTERIES, 9
<b>14.3. Transport hazard class(es)</b>			
9	9	9	9
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

#### 14.6. Special precautions for user

##### Overland transport

Classification code (ADR)	M4
Special provisions (ADR)	230, 377, 376, 636, 310, 348, 387
Limited quantities (ADR)	0
Packing instructions (ADR)	P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
Transport category (ADR)	2
Tunnel restriction code (ADR)	E

##### Transport by sea

Special provisions (IMDG)	230, 376, 377, 310, 348, 384, 387
Limited quantities (IMDG)	0
Packing instructions (IMDG)	P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-I
Stowage category (IMDG)	A
Stowage and handling (IMDG)	SW19



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### Air transport

PCA packing instructions (IATA) Forbidden  
PCA max net quantity (IATA) Forbidden  
CAO packing instructions (IATA) See 965  
Special provisions (IATA) A88, A99, A154, A164, A183, A213, A331, A802

### Rail transport

Special provisions (RID) 230, 310, 348, 376, 377, 387, 636  
Limited quantities (RID) 0  
Packing instructions (RID) P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906

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

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

## SECTION 16: Other information

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Issue date 11/11/2024  
Revision date 11/11/2024  
Supersedes 17/04/2024

Section	Changed item	Change	Comments
1.1	Product name	Added	
3	Comments	Added	

SDS\_UN\_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.