

# 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: 04/17/2024      Revision date: 04/17/2024      Supersedes: 12/08/2021      Version: 7.20

### SECTION 1: Identification

#### 1.1. Product identifier

Product form	Article
Product name	Li-Ion Batteries <100 Wh
Product code	BU ET&A
Other means of identification	Hilti B 7/1.5 Li-Ion (01), Hilti B 7/2.0 Li-Ion (01), Hilti B 7/2.5 Li-Ion (01), Hilti B 12/2.6 Li-Ion (01), Hilti B 12/4.0 Li-Ion (01), Hilti B 12-30 Li-Ion (01), Hilti B 12-55 Li-Ion (01), Hilti B 14/1.6 Li-Ion (01), Hilti B 14/2.6 Li-Ion (01), Hilti B 14/3.3 Li-Ion (01), Hilti B 14/5.2 Li-Ion (01), Hilti B 18/1.6 Li-Ion (01), Hilti B 18/2.6 Li-Ion (01), Hilti B 18/2.6 Li-Ion (02), Hilti B 18/3.3 Li-Ion (01), Hilti B 22/1.6 Li-Ion (01), Hilti B 22/2.6 Li-Ion (01), Hilti B 22/2.6 Li-Ion (02), Hilti B 22/3.0 Li-Ion (01), Hilti B 22/3.3 Li-Ion (01), Hilti B 22/4.0 Li-Ion (01), Hilti B 36/2.4 Li-Ion (01), Hilti B 36/2.6 Li-Ion (02), Hilti B 144/2.6 Li-Ion (01), Hilti B 22-55 Li-Ion (01), Hilti B 22-85 Li-Ion (01)

#### 1.2. Recommended use and restrictions on use

Recommended use	For professional use only, Rechargeable Lithium Ion battery for power tools
-----------------	---

#### 1.3. Supplier

<b>Supplier</b>	<b>Department issuing data specification sheet</b>
Hilti (Canada) Corp. 2201 Bristol Circle Suite 700 CA- L6H 0J8 Oakville, Ontario Canada T +1905 8139200 1-800-363-4458 toll free - F +1 905 813 9009	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>

#### 1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
------------------	--

### SECTION 2: Hazard identification

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

<b>Classification (GHS CA)</b>
Not classified

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

<b>GHS CA labelling</b>
No labelling applicable



# 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

### 2.3. Other hazards

Other hazards which do not result in 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 breaked at the extreme, hazardous materials may be released.

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

### 2.4. Unknown acute toxicity (GHS CA)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable



# 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

### 3.2. Mixtures

Comments

Lithium Ion rechargeable battery pack:

Name/Type	Energy content (Wh)
B 7 / 1.5 Li-Ion (01)	10,80
B 7 / 2.0 Li-Ion (01)	14,40
B 7 / 2.5 Li-Ion (01)	18,00
B 12 / 2.6 Li-Ion (01)	28,10
B 12 / 4.0 Li-Ion (01)	42,66
B 12-30 Li-Ion (01)	27,00 / 28,10
B 12-55 Li-Ion (01)	54,00
B 14 / 1.6 Li-Ion (01)	23,00
B 14 / 2.6 Li-Ion (01)	36,00
B 14 / 3.3 Li-Ion (01)	48,00
B 14 / 5.2 Li-Ion (01)	73,40
B 18 / 1.6 Li-Ion (01)	34,60
B 18 / 2.6 Li-Ion (01)	56,20
B 18 / 2.6 Li-Ion (02)	56,20
B 18 / 3.3 Li-Ion (01)	71,30
B 22 / 1.6 Li-Ion (01)	34,60
B 22 / 2.6 Li-Ion (01)	56,20
B 22 / 2.6 Li-Ion (02)	56,20
B 22 / 3.0 Li-Ion (01)	64,80
B 22 / 3.3 Li-Ion (01)	71,30
B 22 / 4.0 Li-Ion (01)	86,40
B 36 / 2.6 Li-Ion (01)	93,60
B 36 / 2.6 Li-Ion (02)	93,60
B 144 / 2.6 Li-Ion (01)	37,44
B 22-55 Li-Ion (01)	54,00
B 22-85 Li-Ion (01)	85,32

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 criteria of schedule 1, item 3 of the Hazardous Products Regulations.

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

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

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
------------------	--



# 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

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. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	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.
------------------------------	---

### 5.2. Unsuitable extinguishing media

Unsuitable extinguishing media	No additional information available.
--------------------------------	--------------------------------------

### 5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products in case of fire	Formation of toxic gases is possible during heating or in case of fire.
--	---

### 5.4. Special protective equipment and precautions 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.
------------------	--

### 6.2. 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.

### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	Do not soak in water or seawater. Do not expose to strong oxidizers. Do not give a strong mechanical shock or fling. Never disassemble, modify or deform. Do not connect the positive terminal to the negative terminal with electrically conductive material. Use only the chargers / electric tools specified by Hilti to charge or discharge the battery.
Hygiene measures	Do not throw into fire or expose to high temperatures (>85 °C). Do not connect the positive terminal to the negative terminal with electrically conductive material. Always wash hands after handling the product.
Additional hazards when processed	Normal use of this product shall imply use in accordance with the instructions on the packaging and in line with the expectations of a professional user.

# 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

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

Storage conditions	Avoid direct sunlight, high temperature, high humidity. Store in a cool place (temperature: -20 °C ~ 40 °C, humidity: 45 - 85%).
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	-20 – 40 °C
Storage area	Store in a well-ventilated place.
Information on mixed storage	Store away from water. Do not store together with electrically conductive materials.

The accu-pack should be stored at 30 to 50% of the charging capacity.  
Avoid storing in places where it is exposed to static electricity.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Additional information	No technical measures are necessary during normal use. In case of leakage of substances contained within the cell, the information below may be useful.
------------------------	---

### 8.2. Appropriate engineering controls

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

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

<b>Hand protection:</b>				
Wear protective gloves.				
Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12	

<b>Eye protection:</b>				
Chemical goggles or safety glasses				

#### Personal protective equipment symbol(s):



#### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

Physical state	Solid
Appearance	plastic case.
Colour	red Black

# 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

Odour	Odourless
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Relative evaporation rate (ether=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	No data available
Explosive properties	Risk of explosion by shock, friction, fire or other sources of ignition.
Explosive limits	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

Reactivity	No additional information available
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Heating may cause a fire or explosion.
Conditions to avoid	Direct sunlight. Extremely high or low temperatures. Water, humidity.
Incompatible materials	Conductive materials, water, seawater, strong oxidizers and strong acids.
Hazardous decomposition products	fume. Carbon monoxide. Carbon dioxide.
Hardening time:	No additional information available

## 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 sensitization	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.



# 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

Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
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

Li-Ion Batteries <100 Wh	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Li-Ion Batteries <100 Wh	
Bioaccumulative potential	Not established.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Ozone	Not classified
Other information	Do not allow battery packs to penetrate the soil. The battery cell may corrode and electrolyte may leak.

### 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.
Ecology - waste materials	Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 3480	UN 3480	UN 3480	UN 3480
14.2. UN proper shipping name			
LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	Lithium ion batteries	LITHIUM ION BATTERIES
Transport document description			
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

# 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

ADR	IMDG	IATA	RID
14.3. Transport hazard class(es)			
9A	9A	9A	9A
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
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)	188, 230, 310, 348, 376, 377, 387, 636
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)	188, 230, 310, 348, 376, 377, 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
MFAG-No	147

#### 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, A201, A213, A331, A334, A802

#### Rail transport

Special provisions (RID)	188, 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





# 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

### SECTION 15: Regulatory information

#### 15.1. National regulations

No additional information available

### SECTION 16: Other information

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

Issue date 04-17-2024  
Revision date 04-17-2024  
Supersedes 12-08-2021

Indication of changes			
Section	Changed item	Change	Comments
1.3	Department issuing data specification sheet	Modified	
1.4	Emergency number	Modified	
3.2	Comments	Modified	

Other information

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory. All components of this product are listed, or excluded from listing, on the Canadian Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL).

SDS\_CA\_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.