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: 7.22

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 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), Hilti B 22-100 Li-Ion (01)

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

Supplier
Hilti India Private Limited
F-90/4, Okhla Industrial Area Phase 1
IN 110 020 New Delhi
India
T +9111 4270 1111, F +91 405 23318

Department issuing data specification sheet
Hilti AG
Feldkircherstraße 100
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-power.tools@hilti.com

1.5. Emergency phone number

Emergency number	Emergency CONTACT (24-Hour-Number): GBK GmbH Global Regulatory Compliance +49 (0)6132-84463

Country	Organisation/Company	Address	Emergency number	Comment
India	National Poisons Information Centre (NPIC) All India Institute Of Medical Sciences, Department of Pharmacology	110029 New Delhi	+91 (0)11-2658 9391; +91 (0)11-2659 3677 +91 1800 116 117 (toll free)	

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

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 breaked 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 rechercheable 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
B 22-100 Li-Ion (01)	97,2

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.

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.

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.

6.1.1. For non-emergency personnel

Protective equipment	Wear protective gloves. protective clothing. Safety goggles. Gas mask.
Emergency procedures	Evacuate unnecessary personnel.

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.

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. 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.
Hygiene measures	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.

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%).

Storage area	Store in a well-ventilated place.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
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.
Storage temperature	-20 – 40 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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.
Other information	Do not eat, drink or smoke during use.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection: Wear protective gloves. Wear protective gloves.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN ISO 374

Eye protection: Chemical goggles or safety glasses

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

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.

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

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

Li-Ion Batteries <100 Wh	
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.

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
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
14.3. Transport hazard class(es)			
9	9	9	9

ADR	IMDG	IATA	RID
			
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

SECTION 15: Regulatory information

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

No additional information available

Li-Ion Batteries <100 Wh

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

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<ReplaceEmptyCellBy_NO_RELEVANT_DATA>

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.