Li-Ion Batteries BU Measuring

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

Revision date: 7/19/2024 Issue date: 7/19/2024 Supersedes: 10/17/2022 Version: 2.18

SECTION 1: Identification

1.1. Identification

Product form	Article
Product name	Li-Ion Batteries BU Measuring
Product code	BU ET&A
Other means of identification	Li-Ion Batteries POA 41, POA 80, POA 84, POA 90, POA 93, POA 99, PPA 102, PRA 84, PRA 84 02, PRA 84 03, PRA 84 G, PSA 81, PSA 82, PSA 83, AI E20, AI E21, PD-C

1.2. Recommended use and restrictions on use

Recommended use	Rechargeable Lithium Ion battery
Restrictions on use	For professional use only

1.3. Supplier

Supplier
Hilti, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
US TX 75024 Plano
USA
T +1 9724035800
1-800-879-8000 toll free, F +1 918 254 0522
us-sales@hilti.com

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

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(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

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 US)

Not applicable

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)
POA 41	68
POA 80	19,8
POA 84	55
POA 90	45
POA 93	49
POA 99	70,2
PPA 102	43,09
PRA 84	33,0
PRA 84 02	37,0
PRA 84 03	36,0
PRA 84 G	44,0
PSA 81	37
PSA 82	36
PSA 83	97,2
AI E20	8
AI E21	16
PD-C	11

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 section 3.2 of HazCom 2012

SECTION 4: First-aid measures

4.1. Description of 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 and effects (acute and delayed)

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

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) 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 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.

6.1.1. For non-emergency personnel

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 material 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.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

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.

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
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

Li-Ion Batteries BU Measuring
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.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:
Wear protective gloves.

Eye protection:
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
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	No data available
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
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	Risk of explosion by shock, friction, fire or other sources of ignition.
Oxidising properties	No data available

9.2. Other information

No additional information available

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
Viscosity, kinematic	No data available
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.
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

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

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
			
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. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Li-Ion Batteries BU Measuring	CAS-No.	100%

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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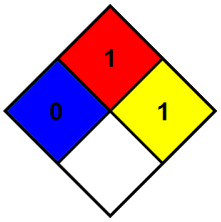
Revision date	07/19/2024
Other information	All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory. All components of this product are listed, or excluded from listing, on the Canadian Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL).
NFPA health hazard	0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



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Indication of changes:			
Section	**Changed item**	**Change**	**Comments**
1	Department issuing data specification sheet	Modified	
1	Emergency number	Modified	

SDS_US_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.