

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Hilti B 36 / 3.0 Li-Ion Hilti B 36 / 3.3 Li-Ion Hilti B 36 / 3.9 Li-Ion Hilti B 36 / 6.0 Li-Ion
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Article category** AC3 Electrical batteries and accumulators
- **Application of the substance / the preparation** Rechargeable Lithium Ion battery for power tools
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Hilti (Gt. Britain) Ltd.
1 Trafford Wharf Road
Trafford Park
GB-M17 1BY Manchester
Tel +44 161 886 1000
Fax +44 161 872 1240
Customer Service:
Tel 0800 886 100 Toll-free
Fax 0800 886200 Toll-free
- **Informing department:** see section 16
- **Emergency telephone number:**
Hilti (Gt. Britain) Ltd.
Tel: 0044 / 161 886 1000
Fax 0044 / 161 872 1240
Schweizerisches Toxikologisches Informationszentrum - 24 h Service
Tel.: 0041 / 1 251 51 51 (international)

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified as hazardous to health or environment according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** May cause an allergic skin reaction.
- **Information concerning particular hazards for human and environment:**

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. Elektrolyte 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.

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**
Lithium Ion recharger battery pack:

Name/Type	Lithium equivalent (g)	Energy content (Wh)
Hilti B 36 / 3.0 Li-Ion	9,0	108
Hilti B 36 / 3.3 Li-Ion	9,9	118,8
Hilti B 36 / 3.9 Li-Ion	11,7	140
Hilti B 36 / 6.0 Li-Ion	18,0	216

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· Dangerous components:

This product contains a positive electrode (Lithium cobalt oxide), a negative electrode (graphite) and electrolyte (ethylene carbonate, diethyl carbonate and lithium hexafluorophosphate). The physical form of the product, however, precludes exposure to workers under normal conditions of use.

4 First aid measures**· Description of first aid measures****· General information**

This product contains an organic electrolyte. If the electrolyte is leaking out of the battery pack, the following measures have to be taken.

· After inhalation

Take affected persons into the open air and position comfortably

Supply fresh air or oxygen; call for doctor.

· After skin contact Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, call a physician.

· After eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

· After swallowing Seek immediate medical advice.

5 Firefighting measures**· Extinguishing media****· Suitable extinguishing agents**

Water spray, carbon dioxide (CO₂), carbon dioxide blanket, foam, or dry powder.

Foam

· Special hazards arising from the substance or mixture Formation of toxic gases is possible during heating or in case of fire.

· Advice for firefighters**· Protective equipment:**

In the event of fire, wear self contained breathing apparatus

Wear full protective suit.

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

6 Accidental release measures**· Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

Keep people at a distance and stay on the windward side.

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

· Environmental precautions: Do not allow to enter the ground/soil.

· Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Collect mechanically.

· Reference to other sections See Section 7 for information on safe handling

7 Handling and storage**· 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.

In case of charging, use only dedicated charger specified by Hilti.

No special precautions necessary if used correctly.

· Information about protection against explosions and fires:

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.

· Conditions for safe storage, including any incompatibilities**· Storage****· Requirements to be met by storerooms and containers:**

Avoid direct sunlight, high temperature, high humidity.

Store in a cool place (temperature: -20°C ~ 35°C, humidity: 45 - 85%)

· Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Store away from water.

Do not store together with electrically conductive materials.

· Further information about storage conditions:

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.

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- **Storage class**
As per VCI (1991) storage classification concept.
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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not required.
- **Penetration time of glove material:** Not required.
- **Eye protection:** Not required.
- **Body protection:** Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

· Form:	plastic case
· Colour:	Black / Red
· Odour:	Odourless
- **pH-value:** Not applicable
- **Change in condition**

· Melting point/Melting range:	Not applicable
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- **Flash point:** Not applicable
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Risk of explosion by shock, friction, fire or other sources of ignition.
- **Density:** Not applicable

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known
- **Incompatible materials:** Conductive materials, water, seawater, strong oxidizers and strong acids.
- **Hazardous decomposition products:** Acrid or harmful gas is emitted during fire

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:**
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:
Irritant to skin and mucous membranes.
 - **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.
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.

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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow battery packs to penetrate the soil.
The battery cell may corrode and electrolyte may leak.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Dispose of this battery pack according to national regulations or return the used battery pack to Hilti.

European waste catalogue

16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 06 00	batteries and accumulators
16 06 05	other batteries and accumulators
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 34	batteries and accumulators other than those mentioned in 20 01 33

- **Uncleaned packagings:**
- **Recommendation:**
Dispose of this battery pack according to official regulations.
Dispose of packaging according to regulations on the disposal of packagings.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID-GGVS/E Class:** 9 Miscellaneous dangerous substances and articles.
- **UN-Number:** 3480
- **UN proper shipping name:** UN 3480 Lithium ion batteries

- **Maritime transport IMDG:**
- **IMDG Class:** 9
- **UN Number:** 3480
- **Packaging group:** II
- **EMS Number:** F-A, S-
- **Correct technical name:** UN 3480 Lithium ion batteries

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3480
- **Packaging group:** II
- **Correct technical name:** UN 3480 Lithium Ion batteries

- **UN "Model Regulation":** 9, II
- **Special precautions for user** Warning: Miscellaneous dangerous substances and articles.
- **Transport/Additional information:**
Lithium-ion batteries are tested in accordance with: UN manual of Tests and Criteria, Part III, subsection 38.3

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **National regulations**
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57** None
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.



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16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet:**

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· **Contact:** Monika Mönch

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

· * **Data compared to the previous version altered.**

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