

## 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: 16/4/2025 Revision date: 16/4/2025 Supersedes: 30/3/2023

Version: 3.0

SECTION 1: Identification			
1.1. Product identifier			
Name Product code	Li-Ion Battery 16S BU Direct Fasteni Article	3P ANR26650 for FX 3-A tool ng	
1.2. Other means of identification			
No additional information available			
1.3. Recommended use of the chemical and re	strictions on us	Se	
Recommended uses and restrictions Recommended use	For professional u	se only, Electrical batteries and accumulators	
1.4. Supplier's details			
Supplier Hilti Far East Private Ltd. 80 Pasir Panjang Road, #16-83/84 Mapletree Business Singapur 117372 T +65 6777 7887 - F +65 6777 3057 sg-customerservice@hilti.com		Department issuing data specification sheet Hilti AG Feldkircherstraße 100 Schaan Liechtenstein 9494 T +423 234 2111 product.compliance-direct.fastening@hilti.com	
Hilti Far East Private Ltd. 80 Pasir Panjang Road, #16-83/84 Mapletree Business Singapur 117372 T +65 6777 7887 - F +65 6777 3057		Hilti AG Feldkircherstraße 100 Schaan Liechtenstein 9494 T +423 234 2111	

## **SECTION 2: Hazard identification**

### 2.1. Classification of the substance or mixture

Not classified

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

No additional information available

## 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.		

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable



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3.2. Mixtures	
Comments	Lithium Ion rechercheable battery pack:
	Name/Type Energy content (Wh).
	16S3P ANR26650 396.
	This product contains a positive electrode (Lithium iron phosphate), a negative electrode (graphite), electrolyte and binder.
	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 measured	ires
First-aid measures general Inhalation	If the electrolyte is leaking out of the battery pack, the following measures have to be taken. Allow affected person to breathe fresh air. Allow the victim to rest. If necessary seek medical advice.
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.
Eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
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.
4.3. Indication of immediate medical attention	n and special treatment needed, 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. Specific hazards arising from the chemi	cal
Fire hazard Hazardous decomposition products in case of fire	Water may not extinguish burning batteries but will cool adjacent batteries and control the spread of fire. Burning batteries will burn themselves out. Virtually all fires involving lithium batteries can be controlled by flooding with water. However, the contents of the battery will react with water and form hydrogen gas. In a confined space, hydrogen gas can form an explosive mixture. In this situation, smothering agents are recomended. Formation of toxic gases is possible during heating or in case of fire. Water might react with
	released Lithium hexafluorophosphate to highly toxic gaseous hydrogen fluoride.
5.3. Special protective actions for fire fighter	rs
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	Use a self-contained breathing apparatus and also a protective suit.

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



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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 water	rs. Notify authorities if liquid enters sewers or public waters.
C.2. Matheda and material far can	

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Methods for cleaning up	Take up liquid spill into absorbent material.
Other information	Dispose of materials or solid residues at an authorized site. For further information refer to
	section 8: "Exposure controls/personal protection". For further information refer to section
	13.

SECTION 7: Handling and stor	
7.1. Precautions for safe handling	
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.
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. Charge within limits of 0°C to 45°C temperature.
	Discharge within limits of -20°C to +60°C temperature.
Hygiene measures	Always wash hands after handling the product.
7.2. Conditions for safe storage, inclu	iding any incompatibilities
Storage conditions	Protect from heat and direct sunlight. Protect from moisture.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	-20 – 45 °C (humidity: 0% - 80%)
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 staring in places where it is expected to static electricity
	Avoid storing in places where it is exposed to static electricity.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters/Occupational exposure limits

No additional information available

## 8.2. Appropriate engineering control measures

Appropriate engineering controls

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



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### 8.3. Personal protection - individual protection measures, such as personal protective equipment (PPE)

### Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection

Wear protective gloves

Туре	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 No additional information available

Respiratory protection

### Personal protective equipment symbol(s)



## **SECTION 9: Physical and chemical properties**

9.1. Information on	basic p	ohysical	and	chemical	properties

3.1. Information on basic physical and their	
Physical state	Solid
Colour	Grey
Odour	Not available
Odour threshold	Not available
рН	Not available
Melting point	Not available
Freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability	Not available
Explosive limits	Explosive properties: Risk of explosion by shock, friction, fire or other sources of ignition.
Vapour pressure	Not available
Relative vapour density at 20°C	Not available
Density	Not available
Relative density	Not available
Solubility	Not available
Partition coefficient n-octanol/water (Log Kow)	Not available
Partition coefficient n-octanol/water (Log Pow)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity, kinematic	Not available
Particle size	Not available
Particle size distribution	Not available
Particle shape	Not available
Particle aspect ratio	Not available
Particle specific surface area	Not available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available.



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#### 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. Acute toxicity

Acute toxicity (oral)
Acute toxicity (dermal)
Acute toxicity (inhalation)
Skin corrosion or irritation
Serious eye damage or irritation
Respiratory or skin sensitisation
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
STOT-single exposure
STOT-repeated exposure
Aspiration hazard
Potential adverse human health effects and
symptoms

Other information

Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) 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. Severely irritant to skin. Irritation: may cause irritation to the respiratory system. 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.

12.1. Toxicity	
Hazardous to the aquatic environment, short-term (acute)	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	Not classified (Based on available data, the classification criteria are not met)
Other information	Do not allow battery packs to penetrate the soil.
	The battery cell may corrode and electrolyte may leak.

Li-Ion Battery 16S3P ANR26650 for FX 3-A tool				
Persistence and degradability Not established.				
12.3. Bioaccumulative potential				
Li-Ion Battery 16S3P ANR26650 for FX 3-A tool				
Bioaccumulative potential No additional information available				

# Bioaccumulative potential



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12.4. Mobility in soil				
Li-Ion Battery 16S3P ANR26650 for FX 3-A tool				
Mobility in soil No additional information available				
12.5. Other adverse effects				
Ozone Other adverse effects	Not classified (Based on available data, the classification criteria are not met) No additional information available			

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Product/Packaging disposal recommendations

Dispose in a safe manner in accordance with local/national regulations. Refer to manufacturer/supplier for information on recovery/recycling.

## **SECTION 14: Transport information**

IMDG	ΙΑΤΑ	UNRTDG
14.1. UN number		
3480	3480	3480
14.2. UN proper shipping name		
LITHIUM ION BATTERIES	Lithium ion batteries	LITHIUM ION BATTERIES
Transport document description		
UN 3480 LITHIUM ION BATTERIES, 9	UN 3480 Lithium ion batteries, 9	UN 3480 LITHIUM ION BATTERIES, 9
14.3. Transport hazard class		
9	9	9
14.4. Packing group, if applicable		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
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 users	
UN RTDG	
Special provisions (UN RTDG)	230, 310, 348, 376, 377, 384, 387
Limited quantities (UN RTDG)	0
Excepted quantities (UN RTDG)	E0
Packing instruction (UN RTDG)	P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
IMDG	
Special provisions (IMDG)	230, 310, 348, 376, 377, 384, 387
Limited quantities (IMDG)	0
Excepted quantities (IMDG)	E0



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Packing instructions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Properties and observations (IMDG)	P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906 F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE S-I - SPILLAGE SCHEDULE India - FLAMMABLE SOLIDS (REPACKING POSSIBLE) A SW19 Electrical batteries containing lithium ion may react (e.g. flame, heat, emission of toxic, corrosive or flammable gases or vapours) or disassemble due to damage, defects or short circuit.
IATA PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provisions (IATA) ERG code (IATA)	E0 Forbidden Forbidden Forbidden See 965 See 965 A88, A99, A154, A183, A201, A213, A331, A334, A802 12FZ

## 14.7. 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				
Regulation		Component / Mixture		
Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations	Applicable	Li-Ion Battery 16S3P ANR26650 for FX 3- A tool		
Arms and Explosives Act	Not applicable			
Chemical Weapons Prohibition Act	Not applicable			
Environmental Protection and Management (Air Impurities) Regulations	Not applicable			
Environmental Protection and Management Act (Hazardous Substances)	Not applicable			
Environmental Public Health (Quality of Piped Drinking Water) Regulations	Not applicable			
Fire Safety Act/Fire Safety (Petroleum and Flammable Materials) Regulations	Not applicable			
Maritime and Port Authority of Singapore (Dangerous, Petroleum and Explosives) Regulations	Not applicable			
Misuse of Drugs Act	Not applicable			
Poisons Act	Not applicable			
Poisons Rules	Not applicable			
Hazardous waste (Control of export, import and transit) Act	Not applicable			
Strategic goods (Control) Act	Not applicable			

### 15.2. International regulations

No additional information available



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### **15.3 Chemical inventory status**

### **Regulatory reference**

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information	
Issue date 16/4/2025	
Revision date 16/4/2025	
Supersedes 30/3/2023	
Data sources European Chemicals Agency, http://echa.europa.eu/. manufacturer.	
Abbreviations and acronyms CAS-No Chemical Abstract Service number	
ADN - European Agreement concerning the International Carriage of Danger	ous Goods by
Inland Waterways	<b>•</b> • • •
ADR - European Agreement concerning the International Carriage of Danger Road	ous Goods by
ATE - Acute Toxicity Estimate	
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 12	72/2008
DNEL - Derived-No Effect Level	
EC50 - Median effective concentration	
ED - Endocrine disruptor	
EC-No European Community number	
EN - European Standard	
IATA - International Air Transport Association	
IMDG - International Maritime Dangerous Goods	
IOELV - Indicative Occupational Exposure Limit Value	
LC50 - Median lethal concentration	
LD50 - Median lethal dose	
NOEC - No-Observed Effect Concentration	
OECD - Organisation for Economic Co-operation and Development	
N.O.S Not Otherwise Specified	
OEL - Occupational Exposure Limit	
PBT - Persistent Bioaccumulative Toxic	
PNEC - Predicted No-Effect Concentration	
REACH - Registration, Evaluation, Authorisation and Restriction of Chemical (EC) No 1907/2006	s Regulation
RID - Regulations concerning the International Carriage of Dangerous Goods	s by Rail
SDS - Safety Data Sheet	,
STP - Sewage treatment plant	
TLM - Median Tolerance Limit	
TRGS - Technical Rules for Hazardous Substances	
VOC - Volatile Organic Compounds	
WGK - Water Hazard Class	
vPvB - Very Persistent and Very Bioaccumulative	
NOAEL - No-Observed Adverse Effect Level	
NOAEC - No-Observed Adverse Effect Concentration	
LOAEL - Lowest Observed Adverse Effect Level	

Indication of changes				
Section	Changed item	Comments		
1	Trade name	Modified		
15	Regulatory information	Added		

SDS SG 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.