

Safety Data Sheet according to GB/T 16483 and GB/T 17519

Version 3.0

## SECTION 1 Chemical product and company identification

#### Product identifier

Product form Article

Name Li-Ion Battery 1683P ANR26650 for FX 3-A tool

Product code BU Direct Fastening

Chemical Chinese name
Chemical English name

Recommended use of the For professional use only

chemical Electrical batteries and accumulators

#### Details of the supplier of the safety data sheet

#### Supplier

Hilti (China) Ltd. 8F, Tower 2, No.58 Yao Yuan

Pudong District

200126 Shanghai - China

T + 86 21 6016 7316

#### Department issuing data specification sheet

Hilti AG

Feldkircherstraße 100 9494 Schaan - Liechtenstein

T + 4 2 3 2 3 4 2 1 1 1

product.compliance-direct.fastening@hilti.com

## Emergency telephone number

Emergency number Emergency CONTACT (24-Hour-Number)

GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

Country	Organisation/Company	Address	Emergency number
China	中国境内化学事故应急咨询电话 / chemical accident emergency consultation service hotline (24/7)		+86 532 83889090

## SECTION 2 Hazards identification

#### Emergency overview

23/07/2025 CN - en 1/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

Treat symptomatically. Grey. Direct sunlight. Extremely high or low temperatures. Water, humidity. fume. Carbon monoxide. Carbon dioxide. Conductive materials, water, seawater, strong oxidizers and strong acids. Dust/Mist. Heating may cause a fire or explosion. Ventilate area. Equip cleanup crew with proper protection. Risk of explosion by shock, friction, fire or other sources of ignition.

#### GHS hazard classification

Other hazards not mentioned above are Not applicable or No data is available.

#### Label elements

No data available

#### Physical and chemical hazards

No additional information available

#### Health hazards

Symptoms/effects

Not expected to present a significant hazard under anticipated conditions of normal use

#### Environmental hazards

No additional information available

### Other hazards

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

#### Product form

Comments

Article.

Lithium Ion rechercheable battery pack:

 $\label{eq:local_entropy} \textbf{Energy content (Wh).}$ 

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 substance to be mentioned according to the criteria of section 3 of GB/T 17519-2013

23/07/2025 CN - en 2/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

## SECTION 4 First-aid measures

### 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 Allow affected person to breathe fresh air.

inhalation Allow the victim to rest.

If necessary seek medical advice

First-aid measures after Remove affected clothing and wash all exposed skin skin contact

area with mild soap and water, followed by warm water

If skin irritation or rash occurs: Get medical

advice/attention.

First-aid measures after eve Rinse immediately with plenty of water.

contact

Obtain medical attention if pain, blinking or redness

persists

First-aid measures after

ingestion

Rinse mouth.

Do NOT induce vomiting.

Obtain emergency medical attention

#### Most important symptoms/effects

Symptoms/effects Not expected to present a significant hazard under

anticipated conditions of normal use

#### Advices for first aid responders

No additional information available

#### Notes for the doctor

Other medical advice or treatment

Treat symptomatically

## SECTION 5 Fire-fighting measures

#### 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 No additional information available

#### Specific hazards

Fire hazard 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.

23/07/2025 CN - en 3/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

Hazardous decomposition Formation of toxic gases is possible during heating or

products in case of fire in case of fire.

Water might react with released Lithium

 $\verb|hexafluorophosphate| to \verb|highly| toxic | \verb|gaseous| | \verb|hydrogen|$ 

fluoride.

Advice for firefighters and protective measures

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

### 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

Personal Precautions, Protective Equipment and Emergency Procedures No additional information available

### For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel

### For emergency responders

Protective equipment Equip cleanup crew with proper protection

Emergency procedures Ventilate area

#### Environmental precautions

Prevent entry to sewers and public waters

Notify authorities if liquid enters sewers or public waters

## Methods and material for containment and cleaning up

Methods for cleaning No additional information available For containment No additional information available

#### Prevention measures for secondary accidents

Prevention Measures for

Secondary Accidents

No additional information available

Other information Dispose of materials or solid residues at an

authorized site

23/07/2025 CN - en 4/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

## SECTION 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. 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

No additional information available

ventilation Additional hazards when

Local and general

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

#### Storage

Storage conditions

Protect from heat and direct sunlight Protect from moisture.

Material used in packaging/containers

No additional information available

packaging/containers
Incompatible products

Strong bases. Strong acids.

Incompatible materials

Storage temperature

Sources of ignition. Direct sunlight.
-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 storing in places where it is exposed to static

electricity.

Storage area Store in a well-ventilated place.

## SECTION 8 Exposure controls / Personal protection equipment

#### Occupational exposure limits

No additional information available

#### Biological limit values

No additional information available

23/07/2025 CN - en 5/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

#### Monitoring methods

No additional information available

#### Appropriate engineering controls

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

### Personal protective equipment

Personal protective

Avoid all unnecessary exposure

 $e \; q \; u \; i \; p \; m \; e \; n \; t$ 

Other information

Do not eat, drink or smoke when using this product.

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
Skin and body protection No additional information available
Respiratory protection No additional information available

Personal protective equipment symbol(s)





## SECTION 9 Physical and chemical properties

Physical state	Solid
Appearance	No data available
Colour	Grey
0 d o u r	No data available
рH	No data available
Melting point	No data available
Freezing point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Flammability	Non flammable.
Vapour pressure	No data available
Relative vapour density at	No data available
20° C	
Density	No data available
Solubility	No data available

23/07/2025 CN - en 6/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

Partition coefficient n-No data available

octanol/water (Log Pow)

Not applicable Viscosity, kinematic Explosive limits (vol %) Not applicable Lower explosion limit No data available Upper explosion limit No data available

Radioactive Nο

Explosive properties Risk of explosion by shock, friction, fire or other

sources of ignition.

Particle size Not available

## SECTION 10 Stability and reactivity

Chemical stability Stable under normal conditions

Reactivity No additional information available Heating may cause a fire or explosion.

Possibility of hazardous

reactions

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

Carbon monoxide

Carbon dioxide

Other properties No additional information available

### SECTION 11 Toxicological information

### Acute toxicity

Acute toxicity (oral) No data available (Based on available data, the

classification criteria are not met)

Acute toxicity (dermal) No data available (Based on available data, the

classification criteria are not met)

Acute toxicity (inhalation) No data available (Based on available data, the

classification criteria are not met)

#### Skin corrosion/irritation

Skin corrosion/irritation No data available (Based on available data, the

classification criteria are not met)

## Serious eye damage/eye irritation

No data available (Based on available data, the Serious eve

damage/irritation classification criteria are not met)

#### Respiratory or skin sensitisation

Respiratory or skin No data available (Based on available data, the

sensitisation classification criteria are not met)

23/07/2025 CN - en 7/12



## Safety Data Sheet

according to GB/T 16483 and GB/T 17519

Germ cell mutagenicity				
Germ cell mutagenicity	No data available (Based on available data, the classification criteria are not met)			
Carcinogenicity				
Carcinogenicity	No data available (Based on available data, the classification criteria are not met)			
Reproductive toxicity				
Reproductive toxicity	No data available (Based on available data, the classification criteria are not met)			
STOT - single exposure				
STOT - single exposure	No data available (Based on available data, the classification criteria are not met)			
STOT - repeated exposure				
STOT - repeated exposure	No data available (Based on available data, the classification criteria are not met)			
Aspiration hazard				
Aspiration hazard	No data available (Based on available data, the classification criteria are not met)			
Li-Ion Battery 16S3P ANR26650 for FX 3-A tool				

## SECTION 12 Ecological information

## Ecotoxicity

Viscosity, kinematic

Hazardous to the aquatic environment, short-term classification criteria are not met)

(acute)

Hazardous to the aquatic environment, long-term classification criteria are not met)

(chronic)

No data available (Based on available data, the classification criteria are not met)

Not applicable

### Persistence and degradability

## Li-Ion Battery $16\,S\,3\,P$ $A\,N\,R\,2\,6\,6\,5\,0$ for FX $3\,-A$ tool

Persistence and degradability Not established

#### Bioaccumulative potential

No additional information available

### Mobility in soil

No additional information available

23/07/2025 CN - en 8/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

#### Other adverse effects

Classification procedure

(0zone)

No data available (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.

## SECTION 13 Disposal considerations

Waste treatment methods

Contaminated container and

packaging

No additional information available No additional information available

No additional information available

Product/Packaging disposal

Additional information

recommendations

Dispose in a safe manner in accordance with

local/national regulations

Refer to manufacturer/supplier for information on

recovery/recycling

Ecological waste information Avoid release to the environment.

### SECTION 14 Transport information

In accordance with JT/T 617 / IMDG / IATA

Overland transport (JT/T 617)	Transport by sea	Air transport
UN number		
3 4 8 0	3 4 8 0	3 4 8 0
Proper shipping name		
LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	Lithium ion batteries
Transport document descriptio	n	
UN 3480, LITHIUM ION BATTERIES, Class 9	UN 3480 LITHIUM ION BATTERIES, 9	UN 3480 Lithium ion batteries, 9
Transport hazard class(es)		
9	9	9
Packing group		L
Not applicable	Not applicable	Not applicable
Environmental hazards		1
Dangerous for the environment No	Dangerous for the environment No Marine pollutant No	Dangerous for the environment No

23/07/2025 CN - en 9/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

Overland transport (JT/T 617)	Transport by sea	Air transport
No supplementary information available		

## Special transport precautions

```
Overland transport (IT/T 617)
  Classification code (JT/T
                                   M4.
  617)
                                   188, 230, 310, 348, 376, 377, 636.
  Special provisions (JT/T
  617)
  Limited quantities (JT/T
  617)
  Excepted quantities (JT/T
                                  ΕΟ.
  617)
                                  P903, P908, P909, LP903, LP904.
  Packing instructions (JT/T
  617)
  Transport category (JT/T
                                   2
  Tunnel restriction code
                                   Ε.
  (JT/T 617)
Transport by sea
                                   188, 230, 310, 348, 376, 377, 384, 387.
  Special provisions (IMDG)
  Limited quantities (IMDG)
                                   0.
  Excepted quantities (IMDG)
                                   P903, P908, P909, P910, P911, LP903, LP904, LP905,
  Packing instructions (IMDG)
                                   LP906.
  EmS-No. (Fire)
                                   F - A.
  EmS-No. (Spillage)
                                   S - T
  Stowage category (IMDG)
                                   Α
  Stowage and handling (IMDG)
                                   SW19.
  Properties and observations
                                   Electrical batteries containing lithium ion may react
  (IMDG)
                                   (e.g. flame, heat, emission of toxic, corrosive or
                                   flammable gases or vapours) or disassemble due to
                                   damage, defects or short circuit.
Air transport
  PCA Excepted quantities
                                   ЕО.
  (IATA)
  PCA Limited quantities
                                   Forbidden.
  (IATA)
  PCA limited quantity max net
                                  Forbidden.
  quantity (IATA)
  PCA packing instructions
                                   Forbidden.
  (IATA)
  PCA max net quantity (IATA)
                                   Forbidden.
  CAO packing instructions
                                   See 965.
  (IATA)
  CAO max net quantity (IATA)
                                   See 965.
  Special provisions (IATA)
                                   A88, A99, A154, A183, A201, A213, A331, A334, A802.
  ERG code (IATA)
                                   12FZ.
```

23/07/2025 CN - en 10/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

## SECTION 15 Regulatory information

Regulations on the Safe Management of Hazardous Chemicals (Decree 591 of the State

Council)

Catalogue of Hazardous Contains Hazardous Chemical(s)

Chemicals (2015)

Regulation on the Administration of Precursor Chemicals (Decree 445 of the State

Council)

Catalogue of Precursor

 $C\,h\,e\,\text{m}\,i\,c\,a\,l\,s$ 

## SECTION 16 Other information

Data sources

European Chemicals Agency, http://echa.europa.eu/manufacturer

CAS-No.	Chemical Abstract Service number
A D N	European Agreement concerning the International
	Carriage of Dangerous Goods by Inland Waterways
A D R	European Agreement concerning the International
	Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
C L P	Classification Labelling Packaging Regulation;
	Regulation (EC) No 1272/2008
D N E L	Derived-No Effect Level
E C 5 0	Median effective concentration
E D	Endocrine disruptor
E C - N o .	European Community number
E N	European Standard
IATA	International Air Transport Association
I M D G	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
L C 5 0	Median lethal concentration
L D 5 0	Median lethal dose
N O E C	No-Observed Effect Concentration
O E C D	Organisation for Economic Co-operation and
	Development
N. O. S.	Not Otherwise Specified
O E L	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and
	Restriction of Chemicals Regulation (EC) No
	1907/2006
RID	Regulations concerning the International Carriage
	Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
T L M	Median Tolerance Limit

23/07/2025 CN - en 11/12



Safety Data Sheet

according to GB/T 16483 and GB/T 17519

TRGS	Technical Rules for Hazardous Substances
V O C	Volatile Organic Compounds
W G K	Water Hazard Class
v P v B	Very Persistent and Very Bioaccumulative
N O A E L	No-Observed Adverse Effect Level
N O A E C	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level

Section	Changed item	Change	Comments
1.	Trade name.	Modified.	
14.	Transportation information.	Modified.	

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.

23/07/2025 CN - en 12/12