ADV128390176

Safety Data Sheet

Nilfisk Dryft & Battery

SECTION 1: Identification

1.1. Product identifier used on the label

Trade name: Nilfisk Dryft & Battery

Other Information: Articles covered by this safety data sheet are shown in the attached list.

Article no

Article no	Description
58002000	NILFISK DRYFT V1 EU
58002001	NILFISK DRYFT V1 UK
58002002	NILFISK DRYFT V1 US
58002003	NILFISK DRYFT V1 AUS NZ
58002020	BATTERY LI ION 25.2V 5AH SIP
58002022	BATTERY LI ION 25.2V 5AH US SIP

1.2. Recommended use of the chemical and restrictions on use

Recommended uses: Lithium ion rechargeable battery.
During normal use and handling the hazardous materials are fully contained inside the battery cell.

1.3. Details of the supplier of the safety data sheet

Supplier

Company: Nilfisk A/S
Address: Marmorvej 8
Zip code: 2100
City: København Ø
Country: DENMARK
Email: sds.com@nilfisk.com
Phone: +45 43 23 81 00

1.4. Emergency phone number

+45 43 23 81 00 (Nilfisk A/S)

SECTION 2: Hazard Identification

2.1. Classification of the chemical in accordance with paragraph (d) of §1910.1200

HazCom classification: The product shall not be classified as hazardous according to the classification and labeling rules for substances and mixtures..

Most serious harmful effects: The product is an article and is consequently not subject to the requirement for a safety data sheet. The intact article does not pose any danger. This safety data sheet describes the danger of the mixture inside the article. Contact is only possible if the article is not intact. The mixture inside the article has the following hazardous characteristics:
The leaking electrolyte is flammable and corrosive. Causes severe skin burns and eye damage. Toxic if swallowed.

2.2. Label elements

The product shall not be classified as hazardous according to the classification and labeling rules for substances and mixtures..

2.3. Other hazards which do not result in classification

Endocrine disrupting properties: None known.
In contact with water releases: Hydrogen/ Hydrogen fluoride.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No	Concentration	Notes
Lithium cobalt nickel oxide	113066-89-0	39.5 %	
Graphite	7782-42-5	20.6 %	
Lithium hexafluorophosphate	21324-40-3	14.38 %	
Copper	7440-50-8	9.34 %	
Iron	7439-89-6	6.6 %	
Aluminium	7429-90-5	3.39 %	
Polyethylene, homopolymer	9002-88-4	2.24 %	
Carbon black	1333-86-4	1.44 %	
nickel	7440-02-0	0.93 %	
Polyvinylidenefluoride (PVDF)	24937-79-9	0.7 %	
1,3-Butadiene-Styrene copolymer	9003-55-8	0.49 %	
Carboxymethyl cellulose	9004-32-4	0.39 %	

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: In case of leaking battery: Seek fresh air. Seek medical advice in case of persistent discomfort.

Ingestion: In case of leaking battery: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Skin contact: In case of leaking battery: Remove contaminated clothing. Wash skin with soap and water. Immediately call a POISON CENTER or doctor/physician.

Eye contact: In case of leaking battery: Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained.

Burns: Flush with water until pain ceases. Remove clothing that is not stuck to the skin - seek medical advice/transport to hospital. If possible, continue flushing until medical attention is obtained.

General: Bring the safety data sheet or label when seeking medical advice.

4.2. Most important symptoms/effects, acute and delayed.

In case of leaking battery: Ingestion may cause caustic burning in mouth, aesophagus and stomach. Pains in mouth, throat and stomach. Difficulty swallowing, feeling unwell and vomiting of blood. Brown spots and burns may appear in and around the mouth. Has a caustic burning effect and causes burning pain, reddening, blistering and burning sores if it comes in contact with skin. Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight. Toxic if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary.

Treat symptoms. Ensure that medical personnel are aware of the material involved, and take precautions to protect themselves.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media.

Suitable extinguishing media:	Metal fire extinction powder, rock salt or dry sand shall be used. In case only water is available, it can be used in large amounts.
Unsuitable extinguishing media:	Carbon dioxide.

5.2. Specific hazards arising from the chemical

Exposure to high temperatures, electrical or mechanical abuse can cause venting of the liquid electrolyte. Product decomposes in fire conditions or when heated to high temperatures, and inflammable and toxic gases may be released.

5.3. Special protective equipment and precautions for fire-fighters.

Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit but gas-tight suit when close proximity to the substance or its vapours is likely. Wear gloves. Move containers from danger area if it can be done without risk. Avoid inhalation of vapor and smoke gases - seek fresh air. Extinguishing water which has been in contact with the product may be corrosive.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	In case of leaking battery: Wear gloves. Wear safety goggles/face protection. Smoking and naked flames prohibited.
For emergency responders:	In addition to the above: Chemical protective suit is recommended.

6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Contain and absorb spills using sand or other absorbent, non-combustible material and transfer to suitable waste containers. Caution! Causes burns. Rinse with water.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Running water and eye wash equipment should be available. Wash hands before breaks, before using restroom facilities, and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored safely out of reach of children and not together with food, feed, medicine and the like. Avoid high temperatures, electrical or mechanical abuse. Keep away from sources of ignition. Do not short circuit the battery. Store in a dry, cool, well-ventilated area. Avoid direct sunlight.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit:	Not applicable. During normal use and handling the hazardous materials are fully contained inside the battery cell.

Measuring methods: Compliance with occupational exposure limits may be checked by occupational hygiene measurements according to NIOSH/OSHA.

Legal basis: ACGIH Threshold Limit Values (TLV's) and Biological Exposure Indices (BEI's), 2024. OSHA 29 CFR part 1910.1000, table Z1-Z3, Limits for Air Contaminants 2006.

8.2. Exposure controls

Appropriate engineering controls: Wear the personal protective equipment specified below.

Personal protective equipment, eye/face protection: In case of leaking battery: Wear safety goggles/face protection.

Personal protective equipment, hand protection: In case of leaking battery: Wear gloves. Type of material: Latex/ Neoprene rubber. The suitability and durability of a glove is dependant on usage, e.g. frequency and duration of contact, glove material thickness, functionality and chemical resistance. Always seek advice from the glove supplier.

Personal protective equipment, respiratory protection: Not required.

Environmental exposure controls: Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
physical state	Battery
Color	Black
Odour	Characteristic (Electrolyte)
Solubility	Insoluble

Parameter	Value/unit	Remarks
Odour threshold	No data	
Melting point	No data	
Freezing point	No data	
Initial boiling point and boiling range	No data	
Flammability (solid, gas)	No data	
Upper/lower flammability limits	No data	
Explosion limits	No data	
Flash Point	No data	
Auto-ignition temperature	No data	
Decomposition temperature:	No data	
pH (solution for use)	No data	
pH (concentrate)	No data	
Kinematic viscosity	No data	
Viscosity	No data	
Partition coefficient n-octanol/water	No data	
Vapour pressure	No data	
Density	No data	
Relative density	No data	
Relative vapour density	No data	
Relative density (sat. air)	No data	
Particle characteristics	No data	

9.2. Other information

Other Information: Nominal capacity: 5 Ah
Nominal energy: 126 Wh
Nominal voltage: 25.2 V

SECTION 10: Stability and reactivity

10.1. Reactivity

In case of leaking battery: Alkalis/ Acids/ Oxidizers/ Water.

10.2. Chemical stability

The battery is hermetically sealed. The battery is stable under normal conditions. Exposure to high temperatures can cause venting of the liquid electrolyte and/or heat generation and ignition. Internal shorting or mechanical abuse could also cause venting of the electrolyte.

10.3. Possibility of hazardous reactions

In contact with water releases: Hydrogen/ Hydrogen fluoride.

10.4. Conditions to avoid

Avoid heating and contact with ignition sources. Avoid direct sunlight. Avoid contact with moisture and water.

10.5. Incompatible materials

In case of leaking battery: Alkalis/ Acids/ Oxidizers.
The battery content must not get in contact with water. If the negative electrode get in contact with water or humidity, hydrogen gas is formed, which may inflame spontaneously.

10.6. Hazardous decomposition products

None, if stored at the recommended storage conditions. Product decomposes in fire conditions or when heated to high temperatures, and inflammable and toxic gases may be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral: The product does not have to be classified. In case of leaking battery: Toxic if swallowed.

Acute toxicity - dermal: The product does not have to be classified.

Acute toxicity - inhalation: The product does not have to be classified.

Skin corrosion/irritation: The product does not have to be classified. In case of leaking battery: Has a caustic burning effect and causes burning pain, reddening, blistering and burning sores if it comes in contact with skin.

Serious eye damage/eye irritation: The product does not have to be classified. In case of leaking battery: Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight.

Respiratory sensitization or skin sensitization: The product does not have to be classified.

Germ cell mutagenicity: The product does not have to be classified.

Carcinogenic properties: The product does not have to be classified. This product contains carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity:	The product does not have to be classified.
Single STOT exposure:	The product does not have to be classified. In case of leaking battery: Inhalation of vapors may cause irritation to the upper airways.
Repeated STOT exposure:	The product does not have to be classified.
Aspiration hazard:	The product does not have to be classified.

11.2. Information on other hazards

Endocrine disrupting properties:	None known.
Other toxicological effects:	In case of leaking battery: Ingestion may cause caustic burning in mouth, aesophagus and stomach. Pains in mouth, throat and stomach. Difficulty swallowing, feeling unwell and vomiting of blood. Brown spots and burns may appear in and around the mouth.

SECTION 12: Ecological information

12.1. Ecotoxicity

The product does not have to be classified.

12.2. Persistence and degradability

Test data are not available.

12.3. Bioaccumulative potential

Test data are not available.

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Avoid discharge to drain or surface water. For disposal of batteries that has become waste refer to 40 CFR 273. Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

SECTION 14: Transport information

Land transport (49CFR)

14.1. UN number:	UN3480	**14.4. Packing group:**	
14.2. UN proper shipping name:	Lithium ion batteries	**14.5. Environmental hazards:**	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	9		
Hazard label(s):	9A		

Sea transport (IMDG)

14.1. UN number:	3480	**14.4. Packing group:**	
14.2. UN proper shipping name:	LITHIUM ION BATTERIES	**14.5. Environmental hazards:**	The product is not a Marine Pollutant (MP).
14.3. Transport hazard class(es):	9	**Environmental Hazardous Substance Name(s):**	
Hazard label(s):	9A		
EmS:	F-A, S-I	**IMDG Code segregation group:**	- None -
Other Information:	Alternative UN number: UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT UN 3481 LITHIUM ION BATTERIES PACKED WITH EQUIPMENT		

Air transport (ICAO-TI / IATA-DGR)

14.1. UN number:	3480	**14.4. Packing group:**	
14.2. UN proper shipping name:	LITHIUM ION BATTERIES	**14.5. Environmental hazards:**	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	9		
Hazard label(s):	9A	**Other Information:**	Alternative UN number: UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT UN 3481 LITHIUM ION BATTERIES PACKED WITH EQUIPMENT

14.6. Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

None.

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

Special Provisions: None known.

15.2. Chemical Safety Assessment

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Other Information: Chemical safety assessment has not been performed.

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
1.0.0	3/26/2025	JST	-

Abbreviations: PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very Persistent and Very Bioaccumulative
STOT: Specific Target Organ Toxicity

Other Information: This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with CFR29, §1910.1200.

Training advice: A thorough knowledge of this safety data sheet should be a prerequisite condition.

Issued: 3/26/2025

Classification method: Calculation based on the hazards of the known components.

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