

Nordkalk**SAFETY DATA SHEET**
TURBO KALK-GH

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 30.05.2024

1.1. Product identifier

Product name TURBO KALK-GH
UFI 3HW0-60WU-9000-FXV1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance / mixture Outdoor use, inorganic fertilizer.
Main intended use PC-FER-1 Fertilisers
Industrial use Yes
Professional use Yes
Consumer use No

1.3. Details of the supplier of the safety data sheet

Company name Björka Mineral AB
Postcode SE-70597
City Glanshammar
Country Sweden
Telephone number +46 10 476 2610
Enterprise No. SE 556039-283801

1.4. Emergency telephone number

Emergency telephone Telephone number: 112
Description: Emergency telephone number
Open 24 hours a day.

Telephone number: +46 (0)10 456 6700
Description: Poison Information Centre (in Sweden, in less acute cases).

Open 24 hours a day.

Identification, comments

Please contact the Emergency Centre in your own country, e.g. 112 in European Union countries.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
Regulation (EC) No 1272/2008
[CLP / GHS]

Eye Dam. 1; H318

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label

Nitric acid, ammonium calcium salt

Signal word

Danger

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280 Wear eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

PBT / vPvB

For results of PBT and vPvB assessment, see point 12.5.

Other hazards

Endocrine disrupting properties: This product does not contain substances included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration ≥ 0.1 %.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Dolomite	CAS No.: 16389-88-1 EC No.: 240-440-2	CLP classification, notes: Not classified.	75 < 80 %	

Nitric acid, ammonium calcium salt	CAS No.: 15245-12-2 EC No.: 239-289-5 REACH Reg. No.: 01-2119493947-16-XXXX	Acute Tox. 4; H302 Eye Dam. 1; H318	20 < 25 %
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Remarks, substance	Acute toxicity estimates (ATE): Nitric acid, ammonium calcium salt (CAS: 15245-12-2): ATE (Oral) = 500 mg/kg
Substance comments	The full text for all hazard statements is displayed in point 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Move away from the hazardous area. Get medical attention. Show this safety data sheet, product container or label to the doctor in attendance.
Inhalation	Move person to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. Keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist or are severe.
Skin contact	Remove contaminated clothing and shoes. Wash contaminated skin with plenty of soap and water or skin cleanser.
Eye contact	Immediately flush eyes with plenty of water for several minutes, holding eyelids open. Protect the uninjured eye. Remove contact lenses, if present and easy to do, and continue rinsing. If eye irritation or other symptoms persist, seek medical attention.
Ingestion	Rinse mouth with water and then drink plenty of water. Do not give milk or alcoholic beverages to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Contact a doctor.

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

Acute symptoms and effects	Causes serious eye damage.
Delayed symptoms and effects	None known.

4.3. Indication of any immediate medical attention and special treatment needed

Other information	Treat symptomatically. No specific instructions.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Improper extinguishing media	None known.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product is not flammable.
Hazardous combustion products	Combustion of the product may form smoke, carbon monoxide, carbon dioxide and other products of incomplete combustion.

5.3. Advice for firefighters

Personal protective equipment	Wear appropriate protective equipment and self-contained breathing apparatus.
Other information	Do not discharge extinguishing waters into drains, sewers or any waterways. Contaminated extinguishing waters must be collected separately and not be released into drains or sewers. Take care of fire waste and contaminated extinguishing water in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Ensure adequate ventilation. Avoid generation and spreading of dust.
Personal protection measures	Wear appropriate personal protective equipment. Avoid breathing dust. Avoid contact with skin or eyes. For personal protection, see section 8.

6.2. Environmental precautions

Environmental precautionary measures	Do not discharge the product or extinguishing waters into drains, sewers or any waterways.
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6.3. Methods and material for containment and cleaning up

Clean up	Avoid generation and spreading of dust. Collect the product in a suitable and sealable containers for disposal.
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6.4. Reference to other sections

Other instructions	Safe handling: see point 7. Personal protective equipment: see point 8. Waste disposal: see point 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Ensure adequate ventilation. Wear appropriate personal protective equipment. Avoid breathing dust. Avoid contact with skin, eyes, and clothing.
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Protective safety measures

Preventive measures to prevent aerosol and dust generation	Prevent formation of dust.
Advice on general occupational hygiene	Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday. Take off contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in a dry, well-ventilated area.
Conditions to avoid	For incompatible materials see point 10.5.

Conditions for safe storage

Requirements for storage rooms and vessels	Keep container tightly closed.
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7.3. Specific end use(s)

Specific use(s)	The use stated in section 1.2.
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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Inorganic dust		Country of origin: Sweden Limit value (8 h) : 5 mg/m ³ Comments: Inhalable fraction Limit value (8 h) : 2,5 mg/m ³ Comments: Respirable fraction	

DNEL / PNEC

Substance	Dolomite
DNEL	Group: Professional Route of exposure: Long-term inhalation (systemic) Value: 10 mg/m ³ Group: Consumer Route of exposure: Long-term inhalation (systemic) Value: 10 mg/m ³
Substance	Nitric acid, ammonium calcium salt
DNEL	Group: Consumer Route of exposure: Acute oral (systemic) Value: 10 mg/kg bw/day
PNEC	Route of exposure: Freshwater Value: 19,6 mg/l Route of exposure: Saltwater Value: 19,5 mg/l Route of exposure: Sewage treatment plant STP Value: 20,8 mg/l

Route of exposure: Freshwater sediments

Value: 95,4 mg/kg dw

Route of exposure: Saltwater sediments

Value: 94,7 mg/kg dw

8.2. Exposure controls

Precautionary measures to prevent exposure

Technical measures to prevent exposure Ensure adequate ventilation. Ensure that eye wash facilities and emergency shower are located near work station. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye / face protection

Suitable eye protection Use tight-fitting safety goggles.

Additional eye protection measures Bottle to wash eyes with clean water.

Hand protection

Suitable gloves type Wear appropriate chemical resistant safety gloves (EN 374).

Suitable materials PVC.

Breakthrough time Value: 8 hour(s)

Thickness of glove material Value: 0,5 mm

Hand protection, comments Wash the gloves with soap and water before taking them off.

Skin protection

Suitable protective clothing Wear appropriate chemical-resistant, impervious protective clothing.

Respiratory protection

Respiratory protection necessary at If it is not possible to reduce exposure levels to below exposure limit values by ventilation or if dust forms, use appropriate respirator.

Recommended type of equipment Filter device/half-mask. Dust filter P2 (for fine dust). (EN 143)

Thermal hazards

Thermal hazards Not relevant.

Appropriate environmental exposure control

Environmental exposure controls Prevent entry into sewers or the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Sand. Gravel.
Colour	Grey.
Odour	Characteristic.
Odour limit	Comments: Not determined.
pH	Value: 8,5 - 9,5 Method: DIN-ISO 787/9 Comments: Concentration: 100 g/l Temperature: 20 °C
Melting point / melting range	Comments: Not determined. Decomposes below the melting point.
Boiling point / boiling range	Comments: Not applicable.
Flash point	Comments: Not applicable.
Flammability	Not flammable.
Explosion limit	Comments: Not applicable.
Vapour pressure	Value: < 0,1 hPa Temperature: 20 °C
Vapour density	Comments: Not determined.
Particle characteristics	Comments: Not determined.
Density	Value: 2,8 - 2,9 g/cm ³ Method: DIN-ISO 787/10 Temperature: 20 °C
Solubility	Medium: Water Value: 0,028 - 0,12 g/l Temperature: 20 °C
Partition coefficient: n-octanol/ water	Comments: Not determined.
Auto-ignition temperature	Comments: Not determined.
Decomposition temperature	Value: > 400 °C
Viscosity	Comments: Not applicable.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties None reported.

9.2.2. Other safety characteristics

Comments None reported.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Not reactive under normal use and storage conditions.

10.2. Chemical stability

Stability Chemically stable under normal storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous reactions under normal use and storage conditions.

10.4. Conditions to avoid

Conditions to avoid None known.

10.5. Incompatible materials

Materials to avoid No known incompatible materials.

10.6. Hazardous decomposition products

Hazardous decomposition products In a fire or if overheated, harmful compounds may be formed (carbon dioxide, carbon monoxide).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Effect tested: ATEmix calculated
Route of exposure: Oral
Value: > 2000 mg/kg

Comments: The product is not classified as acutely toxic. Based on available data, the classification criteria are not met.

Substance Dolomite

Acute toxicity **Effect tested:** LD50
Route of exposure: Oral
Value: > 5000 mg/kg
Animal test species: Rat

Substance Nitric acid, ammonium calcium salt

Acute toxicity **Effect tested:** LD50
Route of exposure: Oral
Method: OECD 401
Value: 500 mg/kg
Animal test species: Rat

Effect tested: LD50
Route of exposure: Dermal
Method: OECD 402
Value: > 2000 mg/kg
Animal test species: Rat

Other information regarding health hazards

Assessment of skin corrosion / irritation, classification	The product is not classified as irritant or corrosive to skin. Based on available data the classification criteria are not met. However, may cause skin irritation in sensitive people.
Substance	Nitric acid, ammonium calcium salt
Eye damage or irritation, test results	Species: Rabbit Evaluation result: Irreversible effects on the eyes.
Assessment of eye damage or irritation, classification	Causes serious eye damage.
Sensitisation	The product is not classified as a respiratory or skin sensitiser. Based on available data the classification criteria are not met.
Mutagenicity	The product is not classified as a mutagen. Data lacking.
Carcinogenicity, other information	The product is not classified as a carcinogen. Data lacking.
Reproductive toxicity	The product is not classified as toxic to reproduction. Data lacking.
Assessment of specific target organ toxicity - single exposure, classification	The product is not classified as toxic to specific target organs at a single exposure. Data lacking.
Assessment of specific target organ toxicity - repeated exposure, classification	The product is not classified as toxic to specific target organs at repeated exposure. Data lacking.
Assessment of aspiration hazard, classification	The product is not classified as an aspiration hazard. Based on available data, the classification criteria are not met.

Symptoms of exposure

In case of ingestion	Not known.
In case of skin contact	May cause skin irritation in sensitive people.
In case of inhalation	Not known.
In case of eye contact	Causes serious eye damage.

11.2 Other information

Endocrine disruption	This product does not contain substances included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration ≥ 0.1 %.
Other information	None reported.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Nitric acid, ammonium calcium salt
Aquatic toxicity, fish	Toxicity type: Acute

	Value: 447 mg/l Effect dose concentration: LC50 Exposure time: 48 hour(s)
Substance	Nitric acid, ammonium calcium salt
Aquatic toxicity, algae	Toxicity type: Acute Value: > 100 mg/l Effect dose concentration: EC50 Exposure time: 72 hour(s) Method: OECD 201
Substance	Nitric acid, ammonium calcium salt
Aquatic toxicity, crustacean	Toxicity type: Acute Value: > 100 mg/l Effect dose concentration: EC50 Exposure time: 48 hour(s) Species: Daphnia magna Method: OECD 202
Substance	Nitric acid, ammonium calcium salt
Toxicity to bacteria	Toxicity type: Acute Value: 1.000 mg/l Effect dose concentration: EC50 Exposure time: 3 hour(s) Method: OECD 209
Ecotoxicity	There is no environmental data available about the product as such. The product is not classified as hazardous to the environment. Avoid release to the environment.

12.2. Persistence and degradability

Persistence and degradability description/evaluation	Not relevant for inorganic substances.
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12.3. Bioaccumulative potential

Bioaccumulation, evaluation	No data available.
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12.4. Mobility in soil

Mobility	No data available.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain substances considered to be either PBT or vPvB at a concentration $\geq 0.1\%$.
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12.6. Endocrine disrupting properties

Endocrine disrupting properties	This product does not contain substances included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration $\geq 0.1\%$.
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12.7. Other adverse effects

Additional ecological information	In solid form, these minerals form a large part of the rocks of the earth's surface. In dissolved form, they are a natural and necessary part of natural waters. These minerals are not easily biodegradable. Negative effects on the environment should therefore be out of the question. Concentrated solutions of minerals can still pose risks to aqueous organisms (disturbance of microflora and microfauna in the sediment and subsequent harmful impact on higher life forms).
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Do not pour into drains. Prevent entry into sewers, waterways and soil.
Appropriate methods of disposal for the contaminated packaging	After usage, empty the packing completely. Uncleaned empty containers are to be handled in the same way as the ones containing products. Do not reuse containers.
Other information	Dispose of in compliance with local and national regulations.

SECTION 14: Transport information

Dangerous goods No

14.1. UN number

Comments The product is not classified for transportation.

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

IMDG Marine pollutant No.

Comments The product is not classified as hazardous to the environment.

14.6. Special precautions for user

Special safety precautions for user No special safety precautions.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no) No

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Restriction of chemicals according to Annex XVII (REACH)	Entry: 65 Nitric acid, ammonium calcium salt CAS nr: 15245-12-2 EC nr: 15245-12-2
Legislation and regulations	No specific regulations.

15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H302 Harmful if swallowed. H318 Causes serious eye damage.
Training advice	Read safety data sheet.
Key literature references and sources for data	SDS by product manufacturer (4.11.2022) Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1).
Abbreviations and acronyms used	DNEL: Derived No-Effect Level EC50: Effective concentration: concentration which kills or immobilises 50 % of exposed organisms LC50: Lethal concentration 50 % (median lethal concentration): concentration which kills 50 % of exposed organisms LD50: Lethal dose 50 % (median lethal dose): dose which kills 50 % of exposed organisms PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No-Effect Concentration vPvB: very Persistent and very Bioaccumulative substance
Version	1
Prepared by	Sweco Finland Oy
Comments	The information of this safety data sheet is based on existing public information sources, such as current legislation, available at the time of publication of the completed safety data sheet, and information on the Customer's products that has been provided by the Customer to Sweco. The Customer is responsible that the information provided to Sweco is accurate and up to date.