SAFETY DATA SHEET

Nordkalk Terra GREEN

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 7.11.2025

1.1. Product identifier

Product name Nordkalk Terra GREEN

UFI Code: 8800-Y0K0-A00N-TT93

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

Use of the substance / mixture Soil stabilisation

Main intended use PC-TEC-OTH Other products for chemical or technical processes

1.3. Details of the supplier of the safety data sheet

Company name Nordkalk Oy Ab

Postal address Skräbbölevägen 18

Postcode FI-21600

City Pargas

Country Finland

Telephone number +358 20 753 7000

Email sds@nordkalk.com

Website www.nordkalk.com

1.4. Emergency telephone number

Emergency telephone Telephone number: 112
Description: Emergency telephone number (in Finland) Open 24 hours a day.

Telephone number: +358 800 147 111 or +358 9 471 977

	Description: Poison Information Centre (in Finland), P.O. Box 790 (Tukholmankatu 17), 00029 HUS 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]	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Calcium oxide, Portland cement
Signal word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation.
Precautionary statements	P102 Keep out of reach of children. P261 Avoid breathing dust/spray. P280 Wear protective gloves / protective clothing / eye protection / face protection. P302+P352 IF ON SKIN: Wash with plenty of water / . P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER / doctor / . P501 Dispose of contents / container to accordance with local regulation.

2.3. Other hazards

PBT / vPvB	The Annex XIII of the REACH Regulation No. 1907/2006 is not applicable to inorganic substances.
Other hazards	This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Calcium oxide	CAS No.: 1305-78-8 EC No.: 215-138-9 REACH Reg. No.: 01-2119475325-36-XXXX	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335	2,5 - 15 %	
Portland cement	CAS No.: 65997-15-1 EC No.: 266-043-4	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335	15 - 35 %	

Substance comments The full text for all hazard statements are displayed in point 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General If the situation is unclear or symptoms persist, seek medical attention.

Inhalation Move exposed person immediately to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin contact Dry product: Brush away dust from the skin with a dry brush. Rinse the skin immediately with plenty of water.
Wet product: Wash contaminated skin with plenty of soap and water.
Take off contaminated clothing and wash before reuse. If skin irritation or other symptoms persist, seek medical attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open. Remove contact lenses, if present and easy to do, and continue rinsing. Get medical advice/attention.

Ingestion Do not induce vomiting. Rinse the mouth and give 1-2 glasses of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

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

Acute symptoms and effects Causes skin irritation. May irritate airways. Risk of 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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Dry chemical, carbon dioxide or foam. Use an extinguishing agent suitable for the surrounding fire.

Improper extinguishing media Do not use water to extinguish fire. Avoid moisture.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards The product is non-combustible. Reacts with water by releasing heat (exothermic reaction). This may cause fire.

Hazardous combustion products No hazardous combustion products known.

5.3. Advice for firefighters

Personal protective equipment Wear appropriate protective equipment and self-contained breathing apparatus.

Other information Avoid dust formation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Ensure adequate ventilation. Keep unnecessary and unprotected people from entering. Avoid generation and spreading of dust. Stop leak if safe to do so. Avoid humidification.

Personal protection measures Wear appropriate personal protective equipment. Avoid contact with skin or eyes. Avoid breathing dust.

6.2. Environmental precautions

Environmental precautionary measures Prevent spreading over great surfaces (e.g. by damming or installing oil booms). Keep the product dry. Avoid release into drains, sewers or waterways. In case of environmental contamination, inform local authorities.

6.3. Methods and material for containment and cleaning up

Containment Avoid generation and spreading of dust. Pick up solid product mechanically. Store in a dry place.

Clean up Collect product with a vacuum cleaner or sweep it up. Keep the material dry.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid contact with skin or eyes. Avoid breathing dust. Wear appropriate personal protective equipment. Avoid generating excess dust. Ensure adequate ventilation (use process enclosures or local exhaust ventilation if necessary). Do not wear contact lenses when handling this product. Eyewash facilities must be available when handling this product.

Protective safety measures

Preventitive 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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands and exposed skin areas before breaks and at the end of workday. Take off contaminated clothing immediately and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in a dry place. Keep out of reach of children.
Conditions to avoid	Keep away from moisture and water. Do not allow contact with air. For incompatible materials see point 10.5.

Conditions for safe storage

Technical measures and storage conditions	Store in a dry, well-ventilated area.
Packaging compatibilities	Unsuitable packaging materials and coatings: Aluminium.

7.3. Specific end use(s)

Specific use(s)	See the identified uses in table 1 of the Appendix of this SDS.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Calcium oxide	CAS No.: 1305-78-8	Country of origin: United Kingdom Limit value (8 h) : 2 mg/m³ Country of origin: United Kingdom Limit value (8 h) : 1 mg/m³ **Limit value (short term)** Value: 4 mg/m³ Comments: Respirable fraction Country of origin: European Union Limit value (8 h) : 1 mg/m³	

		Limit value (short term) Value: 4 mg/m³ Source: Directive (EU) 2017/164 Comments: IOELV Particle fraction: Respirable Country of origin: Finland Limit value (8 h) : 1 mg/m³ **Limit value (short term)** Value: 4 mg/m³
Portland cement	CAS No.: 65997-15-1	Country of origin: United Kingdom Limit value (8 h) : 10 mg/m³ Particle fraction: Inhalable Country of origin: United Kingdom Limit value (8 h) : 4 mg/m³ Particle fraction: Respirable Country of origin: Finland Limit value (8 h) : 5 mg/m³ Comments: Cement dust Particle fraction: Inhalable Country of origin: Finland Limit value (8 h) : 1 mg/m³ Comments: Cement dust Particle fraction: Respirable
Dust		Country of origin: United Kingdom Limit value type: TWA Limit value (8 h) : 4 mg/m³ Particle fraction: Respirable Country of origin: United Kingdom Limit value type: TWA Limit value (8 h) : 10 mg/m³ Particle fraction: Inhalable

DNEL / PNEC

Substance	Calcium oxide
DNEL	**Group:** Professional **Route of exposure:** Acute inhalation (local) **Value:** 4 mg/m³ **Comments:** respirable dust **Group:** Professional **Route of exposure:** Long-term inhalation (local) **Value:** 1 mg/m³

	Comments: respirable dust
	Group: Consumer **Route of exposure:** Acute inhalation (local) **Value:** 4 mg/m³ **Comments:** respirable dust
	Group: Consumer **Route of exposure:** Long-term inhalation (local) **Value:** 1 mg/m³ **Comments:** respirable dust
PNEC	**Route of exposure:** Freshwater **Value:** 0,37 mg/l
	Route of exposure: Saltwater **Value:** 0,24 mg/l
	Route of exposure: Sewage treatment plant STP **Value:** 2,27 mg/l
	Route of exposure: Soil **Value:** 817,4 mg/kg

8.2. Exposure controls

Precautionary measures to prevent exposure

Technical measures to prevent exposure	Handle the product in closed systems or provide sufficient ventilation. Use local exhaust ventilation if necessary. Emergency eyewash equipment must be available at workplace.

Eye / face protection

Suitable eye protection	Use tight-fitting safety goggles. (EN 166:2001)
Eye protection, comments	Do not wear contact lenses when handling this product. It is advisable to have individual pocket eyewash.

Hand protection

Suitable gloves type	Use appropriate chemical-resistant, impervious gloves. (EN ISO 374-1:2018, type A or B)
Suitable materials	Nitrile rubber.

Skin protection

Suitable protective clothing	Wear appropriate chemical-resistant, impervious protective clothing. Wear appropriate protective footwear.
Additional skin protection measures	Avoid prolonged or repeated contact with skin. Wash contaminated skin after exposure. Remove contaminated clothing and shoes and wash/clean them before reuse.

Respiratory protection

Respiratory protection necessary at	If it is not possible to reduce exposure levels to below exposure limit values by ventilation, use appropriate respirator.
Recommended type of equipment	Particle filter mask. (FFP1/FFP2/FFP3)
Respiratory protection, comments	See the relevant exposure scenario in the Appendix.

Thermal hazards

Thermal hazards	Not relevant.

Appropriate environmental exposure control

Environmental exposure controls	Prevent entry into sewers or the environment. All ventilation systems should be filtered before discharge to atmosphere.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid. Powder.
Colour	White. Beige. Light brown.
Odour	Odourless or mild odor.
Odour limit	Comments: Not determined.
pH	Status: In aqueous solution Value: 12 - 13 Comments: Wet product
Melting point / melting range	Value: > 450 °C Method: EU A.1 Comments: Calcium oxide
Boiling point / boiling range	Comments: Not applicable.
Flash point	Comments: Not applicable.
Flammability	Not flammable. (EU A.10)
Explosion limit	Comments: Not applicable.
Vapour pressure	Comments: Not applicable.
Vapour density	Comments: Not applicable.
Particle characteristics	Comments: Not determined.
Density	Value: 700 - 1300 kg/m³ Temperature: 20 °C
Solubility	Medium: Water Value: 1337,6 mg/l Method: EU A.6 Comments: Calcium oxide Medium: Water Comments: Portland cement: Partially soluble.

Partition coefficient: n-octanol/ water	Comments: Not applicable.
Auto-ignition temperature	Comments: Not self-igniting.
Decomposition temperature	Value: > 450 °C Comments: Calcium oxide
Viscosity	Comments: Not applicable.

9.2. Other information

9.2.2. Other safety characteristics

Comments	None reported.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Reacts with water by releasing heat (exothermic reaction). Calcium oxide absorbs moisture and carbon dioxide from air to form calcium carbonate, which is a common material in nature.

10.2. Chemical stability

Stability	Chemically stable under normal storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts exothermically with acids (releasing heat). Reacts with water by releasing heat (exothermic reaction).

10.4. Conditions to avoid

Conditions to avoid	Do not allow contact with air. Protect from moisture. Do not store in damp conditions or areas of high humidity.

10.5. Incompatible materials

Materials to avoid	Acids. Water. Aluminium. Brass. In the presence of moisture produces hydrogen which may cause risk of explosion.

10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products known.

SECTION 11: Toxicological information

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

Substance	Calcium oxide

Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Method:** OECD 425 **Value:** > 2000 mg/kg bw **Animal test species:** Rat **Effect tested:** LD50 **Route of exposure:** Dermal **Method:** OECD 402 **Value:** > 2500 mg/kg bw **Animal test species:** Rabbit
Substance	Portland cement
Acute toxicity	**Effect tested:** LD0 **Route of exposure:** Dermal **Method:** Limit value test **Duration:** 24 hour(s) **Value:** 2000 mg/kg **Animal test species:** Rabbit **Comments:** No mortality.
Other toxicological data	The product is not classified as acutely toxic. There is no toxicological data available about the product as such.

Other information regarding health hazards

Substance	Calcium oxide
Skin corrosion / irritation test result	**Toxicity type:** Skin irritation **Method:** In vivo **Species:** Rabbit **Evaluation result:** Irritating. **Toxicity type:** Skin corrosion **Method:** In vitro OECD 431 **Evaluation result:** Not corrosive.
Assessment of skin corrosion / irritation, classification	Causes skin irritation.
Substance	Calcium oxide
Eye damage or irritation, test results	**Toxicity type:** Eye damage **Method:** In vivo **Species:** Rabbit **Evaluation result:** Causes serious eye damage
Assessment of eye damage or irritation, classification	Causes serious eye damage.
Sensitisation	The product is not classified as a respiratory or skin sensitiser.
Mutagenicity	The product is not classified as a mutagen. Calcium oxide: In vitro (OECD 471, 473, 476 read across)
Carcinogenicity, other information	The product is not classified as a carcinogen.
Reproductive toxicity	The product is not classified as toxic to reproduction.

Assessment of specific target organ toxicity - single exposure, classification	May cause respiratory irritation.
Assessment of specific target organ toxicity - repeated exposure, classification	The product is not classified as toxic to specific target organs at repeated exposure.
Assessment of aspiration hazard, classification	The product is not classified as an aspiration hazard.

Symptoms of exposure

In case of ingestion	Irritates the gastrointestinal tract.
In case of skin contact	Repeated or prolonged exposure may cause drying of skin, skin irritation and dermatitis.

11.2 Other information

Endocrine disruption	Ingredients: no endocrine disrupting properties reported.
Other information	No other health effects reported.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Calcium oxide
Aquatic toxicity, fish	**Value:** 50,6 mg/l **Effect dose concentration:** LC50 **Test duration:** 96 hour(s) **Species:** freshwater fish **Comments:** calcium dihydroxide **Value:** 457 mg/l **Effect dose concentration:** LC50 **Test duration:** 96 hour(s) **Species:** marine water fish **Comments:** calcium dihydroxide
Substance	Calcium oxide
Aquatic toxicity, algae	**Value:** 184,57 mg/l **Effect dose concentration:** EC50 **Test duration:** 72 hour(s) **Species:** freshwater algae **Comments:** calcium dihydroxide **Value:** 48 mg/l **Effect dose concentration:** NOEC **Test duration:** 72 hour(s) **Species:** freshwater algae **Comments:** calcium dihydroxide
Substance	Calcium oxide
Aquatic toxicity, crustacean	**Toxicity type:** Chronic

	Value: 32 mg/l **Effect dose concentration:** NOEC **Test duration:** 14 day(s) **Species:** marine water invertebrates **Comments:** calcium dihydroxide **Value:** 49,1 mg/l **Effect dose concentration:** EC50 **Test duration:** 48 hour(s) **Species:** freshwater invertebrates **Comments:** calcium dihydroxide **Value:** 158 mg/l **Effect dose concentration:** LC50 **Test duration:** 96 hour(s) **Species:** marine water invertebrates **Comments:** calcium dihydroxide
Toxicity to earthworm	Value: 2000 mg/kg Species: macro organisms Method: soil dry weight Comments: calcium dihydroxide
Toxicity to soil microorganisms	Value: 12000 mg/kg Species: microorganisms Method: soil dry weight Comments: calcium dihydroxide
Plant toxicity	Value: 1080 mg/kg Effect dose concentration: NOEC Test duration: 21 day(s) Comments: calcium dihydroxide
Ecotoxicity	The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Not relevant for inorganic substances.

12.4. Mobility in soil

Mobility	Calcium oxide reacts with water and/or carbon dioxide to form respectively calcium dihydroxide and/or calcium carbonate, which are sparingly soluble, and present a low mobility in most soils.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not relevant for inorganic substances.

12.6. Endocrine disrupting properties

Endocrine disrupting properties	Ingredients: no endocrine disrupting properties reported.

12.7. Other adverse effects

Additional ecological information	The product is not classified as hazardous to the environment. Prevent entry into drains, sewers, waterways or soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Avoid release to the environment.
Appropriate methods of disposal for the contaminated packaging	The used packaging is only meant for packing this product; it should not be reused for other purposes. After usage, empty the packing completely.
Other information	Processing, use or contamination of this product may change the waste management options. Dispose of in compliance with local and national regulations.

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	1910
IMDG	1910
ICAO/IATA	1910
Comments	Not classified as hazardous for transport [ADR (road), RID (rail), ADN (inland waterways) and IMDG (sea)]. Classified as hazardous for air transport (ICAO/IATA).

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	Calcium oxide
ADR/RID/ADN	Calcium oxide
IMDG	CALCIUM OXIDE
ICAO/IATA	CALCIUM OXIDE

14.3. Transport hazard class(es)

ADR/RID/ADN	8
Classificaton code ADR/RID/ADN	C6
IMDG	8
ICAO/IATA	8

14.4. Packing group

ICAO/IATA	III

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	Avoid any release of dust during transportation, by using air-tight tanks for powders and covered trucks for pebbles.

14.7. Maritime transport in bulk according to IMO instruments

Product name	CALCIUM OXIDE

Additional information

Hazard label ADR/RID/ADN	8
Hazard label IMDG	8
Hazard label ICAO/IATA	8

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: 47 Chromium VI compounds

15.2. Chemical safety assessment

Chemical safety assessment	Has been carried out for calcium oxide.

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation.
Training advice	Read safety data sheet.
Key literature references and sources for data	Finnish-language SDS for the product EULA Safety Data Sheet for Calcium oxide (v. 4.0/EN, December 2020) EH40/2005 Workplace exposure limits (4th ed, 2020) Decree on Concentrations known to be Hazardous 654/2020 (HTP-arvot 2020), Finland
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
NOEC: No Observed Effect Concentration: concentration at which no effects are observed
OEL: Occupational exposure limit
PNEC: Predicted No-Effect Concentration
STEL: Short-term exposure limit.
TWA: Time-weighted average

Version 1

Comments Disclaimer
This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation (EC 1907/2006; article 31 and Annex II), as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.