SAFETY DATA SHEET

# Nordkalk C-Mix

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 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 | 02.06.2010 |
| Revision date | 21.12.2020 |

### 1.1. Product identifier

| | |
|---|---|
| Product name | Nordkalk C-Mix |

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

| | |
|---|---|
| Use categories nordic (UCN). | 55 Others |
| Use of the substance / preparation | Flue-gas cleaning |

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

| | |
|---|---|
| Company name | Nordkalk Oy Ab |
| Office address | Skräbbölevägen 18 |
| Postcode | 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<br>Description: Emergency telephone number (in Finland) Open 24 hours a day.<br><br>Telephone number: +358 800 147 111 or +358 9 471 977<br>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

| | |
|---|---|
| CLP classification, notes | In accordance with CLP/GHS regulation (EC) No 1272/2008, the product has not been classified as hazardous. |

### 2.2. Label elements

| | |
|---|---|
| Other label information (CLP) | No labeling. In accordance with current regulations, this product has not been classified as hazardous. |

### 2.3. Other hazards

| | |
|---|---|
| PBT / vPvB | For results of PBT and vPvB assessment, see point 12.5. |
| Health effect | Dust in high concentrations may irritate eyes, airways and skin. |
| Other hazards | None reported. |

## SECTION 3: Composition / information on ingredients

### 3.2. Mixtures

| Substance | Identification | Classification | Contents |
|---|---|---|---|
| Calcium carbonate | CAS No.: 1317-65-3<br>EC No.: 215-279-6 | CLP classification, notes:<br>Not classified. | 75 - 100 % |
| Activated carbon | CAS No.: 7440-44-0<br>EC No.: 931-328-0<br>REACH Reg. No.:<br>01-2119488894-16-XXXX | CLP classification, notes:<br>Not classified. | 10 - 20 % |
| Substance comments | The product does not contain ingredients classified as hazardous to health or the environment at concentrations exceeding the concentration limits for listing such ingredients. | | |

## 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 | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | Rinse skin with water/shower. Remove contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention. |
| Eye contact | Immediately flush eyes with plenty of water for several minutes, holding eyelids open. If eye irritation or other symptoms persist, seek medical attention. |
| Ingestion | Rinse mouth with water and then drink plenty of water. Do NOT induce vomiting. Get medical attention if symptoms occur. |

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

| | |
|---|---|
| Acute symptoms and effects | Dust may irritate the eyes and the respiratory tract. |

| | |
|---|---|
| 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 | Use an extinguishing agent suitable for the surrounding fire. |
| Improper extinguishing media | Do not use full water jet as an extinguisher. |

### 5.2. Special hazards arising from the substance or mixture

| | |
|---|---|
| Fire and explosion hazards | The product is not flammable. |
| Hazardous combustion products | Harmful compounds may be evolved during fire. > 600 °C. Carbon dioxide. Carbon monoxide. |

### 5.3. Advice for firefighters

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

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

| | |
|---|---|
| General measures | Avoid generation and spreading of dust. |
| Personal protection measures | Wear appropriate personal protective equipment. Avoid breathing dust. |

### 6.2. Environmental precautions

| | |
|---|---|
| Environmental precautionary measures | No special measures required. |

### 6.3. Methods and material for containment and cleaning up

| | |
|---|---|
| Clean up | Avoid generation and spreading of dust. Absorb spill with inert material (e.g. sand, diatomaceous earth, commercial absorbent) and collect in clearly labeled containers for disposal. Collect product with a vacuum cleaner or by brushing, and store in a tightly sealed container for recovery or disposal. Wash surfaces with plenty of water. |

### 6.4. Reference to other sections

| | |
|---|---|
| Other instructions | Safe handling: see point 7.<br>Personal protective equipment: see point 8.<br>Waste disposal: see point 13. |

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

| | |
|---|---|
| Handling | Ensure adequate ventilation. Avoid breathing dust. Avoid contact with skin, eyes, and clothing. |

### 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. 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 place. Store in a closed container. |
| Conditions to avoid | Protect from moisture.<br>For incompatible materials see point 10.5. |

### Conditions for safe storage

| | |
|---|---|
| Packaging compatibilities | Store in original package or container. |
| Requirements for storage rooms and vessels | Keep container tightly closed. |

## 7.3. Specific end use(s)

| | |
|---|---|
| Specific use(s) | None reported. |

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

| Substance | Identification | Value | TWA Year |
|---|---|---|---|
| Activated carbon | CAS No.: 7440-44-0 | Country of origin:<br>United Kingdom<br>TWA (8 h): 10 mg/m³<br>Comments: Graphite, inhalable dust<br>TWA (8 h): 4 mg/m³<br>Comments: Graphite, respirable dust | 2018 |
| Dust | | Country of origin:<br>United Kingdom<br>TWA (8 h): 4 mg/m³<br>Comments: Inhalable dust<br>TWA (8 h): 10 mg/m³<br>Comments: Respirable dust | 2018 |

### DNEL / PNEC

| | |
|---|---|
| Substance | Calcium carbonate |
| DNEL | **Group:** Professional<br>**Route of exposure:** Long-term inhalation (local)<br>**Value:** 4,26 mg/m³<br><br>**Group:** Professional<br>**Route of exposure:** Long-term inhalation (systemic)<br>**Value:** 10 mg/m³<br><br>**Group:** Consumer<br>**Route of exposure:** Long-term inhalation (local)<br>**Value:** 1,06 mg/m³<br><br>**Group:** Consumer<br>**Route of exposure:** Long-term inhalation (systemic)<br>**Value:** 10 mg/m³ |
| PNEC | **Route of exposure:** Sewage treatment plant STP |

| | |
|---|---|
| | **Value:** 100 mg/l<br>**Comments:** NOEC; AF=10 |
| Substance | Activated carbon |
| DNEL | **Group:** Professional<br>**Route of exposure:** Acute inhalation (local)<br>**Value:** 3 mg/m³<br><br>**Group:** Professional<br>**Route of exposure:** Long-term inhalation (systemic)<br>**Value:** 3 mg/m³<br><br>**Group:** Consumer<br>**Route of exposure:** Acute inhalation (local)<br>**Value:** 0,5 mg/m³<br><br>**Group:** Consumer<br>**Route of exposure:** Long-term inhalation (systemic)<br>**Value:** 0,5 mg/m³ |

### 8.2. Exposure controls

#### Precautionary measures to prevent exposure

| | |
|---|---|
| Technical measures to prevent exposure | Ensure adequate ventilation. Use local exhaust ventilation if necessary. |

#### Eye / face protection

| | |
|---|---|
| Suitable eye protection | Use tight-fitting safety goggles. EN 166. |

#### Hand protection

| | |
|---|---|
| Suitable gloves type | Use appropriate chemical-resistant, impervious gloves. |
| Suitable materials | PVC. Natural rubber. Neoprene. |

#### Skin protection

| | |
|---|---|
| Suitable protective clothing | Wear appropriate protective clothing. |

#### Respiratory protection

| | |
|---|---|
| Respiratory protection necessary at | In case of inadequate ventilation wear respiratory protection. |
| Recommended type of equipment | Particle filter mask. FFP2, FFP3 (EN 143, EN 149). |

#### 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 | Solid. Powder. Granular. |
| Colour | White. Beige. |
| Odour | Odourless. |
| Odour limit | Comments: Unknown. |
| pH | Status: In aqueous solution<br>Value: 7 - 9 |
| Melting point / melting range | Comments: Unknown. |
| Boiling point / boiling range | Comments: Not relevant. |
| Flash point | Comments: Not relevant. |
| Evaporation rate | Comments: Not relevant. |
| Flammability (solid, gas) | Not flammable. |
| Explosion limit | Comments: Not applicable. |
| Vapour pressure | Comments: Not applicable. |
| Vapour density | Comments: Not applicable. |
| Density | Value: 0,85 - 1,60 kg/dm³ (bulk density)<br>Comments: Calcium carbonate |
| Solubility | Medium: Water<br>Value: 0,0166 g/l<br>Method: OECD 105<br>Comments: Calcium carbonate<br>Temperature: 20 °C<br><br>Medium: Water<br>Method: OECD 105<br>Comments: Activated carbon: Insoluble. |
| Partition coefficient: n-octanol/ water | Comments: Not applicable. |
| Spontaneous combustability | Comments: Not self-igniting. |
| Decomposition temperature | Value: > 450 °C (Calcium Carbonate) |
| Viscosity | Comments: Not applicable. |
| Explosive properties | Not classified as explosive. |
| Oxidising properties | Not classified as oxidising. |

### 9.2. Other information

### Other physical and chemical properties

| | |
|---|---|
| Comments | None reported. |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

| | |
|---|---|
| Reactivity | Not reactive under normal use and storage conditions. Contact with acids |

| | |
|---|---|
| | liberates toxic gas. |

### 10.2. Chemical stability

| | |
|---|---|
| Stability | Chemically stable under normal storage conditions. |

### 10.3. Possibility of hazardous reactions

| | |
|---|---|
| Possibility of hazardous reactions | Contact with acids liberates toxic gas. $CO_2$. Reacts with acids to form carbon dioxide which displaces the oxygen in the air in closed spaces. |

### 10.4. Conditions to avoid

| | |
|---|---|
| Conditions to avoid | Strong heating. Protect from moisture. |

### 10.5. Incompatible materials

| | |
|---|---|
| Materials to avoid | Acids. Strong oxidizing agents. |

### 10.6. Hazardous decomposition products

| | |
|---|---|
| Hazardous decomposition products | In a fire or if overheated, harmful compounds may be formed (carbon dioxide, carbon monoxide). Reacts with acids to form carbon dioxide which displaces the oxygen in the air in closed spaces. |

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

| | |
|---|---|
| Substance | Calcium carbonate |
| Acute toxicity | **Effect tested:** LD50<br>**Route of exposure:** Oral<br>**Method:** OECD 420<br>**Value:** > 2000 mg/kg bw<br>**Animal test species:** Rat<br><br>**Effect tested:** LD50<br>**Route of exposure:** Dermal<br>**Method:** OECD 402<br>**Value:** > 2000 mg/kg bw<br>**Animal test species:** Rat<br><br>**Effect tested:** LC50<br>**Route of exposure:** Inhalation.<br>**Method:** OECD 403<br>**Duration:** 4 hour(s)<br>**Value:** > 3 mg/l<br>**Animal test species:** Rat |
| Substance | Activated carbon |
| Acute toxicity | **Effect tested:** LD50<br>**Route of exposure:** Oral<br>**Method:** OECD 423<br>**Value:** > 2000 mg/kg |

| | |
|---|---|
| | **Animal test species:** Rat<br><br>**Effect tested:** LC50<br>**Route of exposure:** Inhalation.<br>**Method:** OECD 403<br>**Value:** > 64,4 mg/l<br>**Animal test species:** Rat |
| 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 carbonate |
| Skin corrosion / irritation test result | **Method:** In vivo OECD 404<br>**Species:** Rabbit<br>**Evaluation result:** Not irritating. |
| Assessment of skin corrosion / irritation, classification | The product is not classified as irritant or corrosive to skin. However, may irritate skin. |
| Substance | Calcium carbonate |
| Eye damage or irritation, test results | **Method:** In vivo OECD 405<br>**Species:** Rabbit<br>**Evaluation result:** Not irritating. |
| Assessment of eye damage or irritation, classification | The product is not classified as damaging or irritating to eyes. However, dust may irritate eyes. |
| Substance | Calcium carbonate |
| Respiratory or skin sensitisation | **Method:** OECD 429<br>**Species:** Mouse<br>**Evaluation result:** Not sensitizing |
| Sensitisation | The product is not classified as a respiratory or skin sensitiser. |
| Mutagenicity | The product is not classified as a mutagen.<br>Calcium carbonate: In vitro OECD 471, OECD 473, OECD 476. |
| Carcinogenicity, other information | The product is not classified as a carcinogen. |
| Reproductive toxicity | The product is not classified as toxic to reproduction.<br>Calcium carbonate: NOEL: 1000 mg/kg bw/d (OECD 422). |
| Assessment of specific target organ SE, classification | The product is not classified as toxic to specific target organs at a single exposure. However, may irritate airways. |
| Specific target organ toxicity - RE, test results | **Method:** OECD 422<br>**Route of exposure:** Oral<br>**Species:** Rat<br>**Comments:** Calcium carbonate: NOAEL: 1000 mg/kg bw/d<br><br>**Method:** OECD 413<br>**Route of exposure:** Inhalation.<br>**Species:** Rat<br>**Comments:** Calcium carbonate: NOAEC: 0,212 mg/l |
| Assessment of specific target organ toxicity RE, 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

| | |
|---|---|
| Other information | No other health effects reported. |

## SECTION 12: Ecological information

### 12.1. Toxicity

| | |
|---|---|
| Substance | Calcium carbonate |
| Acute aquatic, fish | **Effect dose concentration:** LC50<br>**Test duration:** 96 hour(s)<br>**Species:** Oncorhynchus mykiss<br>**Method:** OECD 203<br>**Evaluation:** >100% v/v saturated solution of test material - Exceeds maximum solubility of substance.<br>**Comments:** Acute toxicity is greater than the highest concentration tested and therefore exceeds the maximum solubility of the product in water. |
| Substance | Calcium carbonate |
| Acute aquatic, algae | **Value:** > 14 mg/l<br>**Test duration:** 72 hour(s)<br>**Species:** Desmodesmus subspicatus<br>**Method:** OECD 201<br>**Comments:** EC50 / EC20 / EC10 / NOEC |
| Substance | Calcium carbonate |
| Acute aquatic, Daphnia | **Effect dose concentration:** EC50<br>**Test duration:** 48 hour(s)<br>**Species:** Daphnia magna<br>**Method:** OECD 202<br>**Evaluation:** >100% v/v saturated solution of test material - Exceeds maximum solubility of substance.<br>**Comments:** Acute toxicity is greater than the highest concentration tested and therefore exceeds the maximum solubility of the product in water. |
| Toxicity to bacteria | **Value:** > 1000 mg/l<br>**Effect dose concentration:** EC50<br>**Test duration:** 3 hour(s)<br>**Species:** Activated sludge<br>**Method:** OECD 209<br>**Comments:** Calcium carbonate<br><br>**Value:** 1000 mg/l<br>**Effect dose concentration:** NOEC<br>**Test duration:** 3 hour(s)<br>**Species:** Activated sludge<br>**Method:** OECD 209<br>**Comments:** Calcium carbonate |
| Toxicity to earthworm | **Value:** > 1000 mg/kg<br>**Effect dose concentration:** EC50<br>**Test duration:** 14 day(s) |

| | |
|---|---|
| | **Species:** Eisenia fetida<br>**Method:** OECD 207<br>**Comments:** Calcium carbonate<br><br>**Value:** 1000 mg/kg<br>**Test duration:** 14 day(s)<br>**Species:** Eisenia fetida<br>**Method:** OECD 207<br>**Comments:** Calcium carbonate |
| Toxicity to soil microorganisms | **Value:** 1000 mg/kg<br>**Effect dose concentration:** EC50<br>**Test duration:** 28 day(s)<br>**Species:** microorganisms<br>**Method:** OECD 216<br>**Comments:** Calcium carbonate<br><br>**Value:** 1000 mg/kg<br>**Effect dose concentration:** NOEC<br>**Test duration:** 28 day(s)<br>**Species:** microorganisms<br>**Method:** OECD 216<br>**Comments:** Calcium carbonate |
| Plant toxicity | **Value:** > 1000 mg/kg<br>**Effect dose concentration:** EC50<br>**Test duration:** 21 day(s)<br>**Species:** Glycine max<br>Lycopersicon esculentum<br>Avena sativa<br>**Method:** OECD 208<br>**Comments:** Calcium carbonate<br><br>**Value:** 1000 mg/kg<br>**Effect dose concentration:** NOEC<br>**Test duration:** 21 day(s)<br>**Species:** Glycine max<br>Lycopersicon esculentum<br>Avena sativa<br>**Method:** OECD 208<br>**Comments:** Calcium carbonate |
| Aquatic, comments | The product is not classified as hazardous to the environment. |

## 12.2. Persistence and degradability

| | |
|---|---|
| Persistence and degradability, comments | Not relevant for inorganic substances. |

## 12.3. Bioaccumulative potential

| | |
|---|---|
| Bioaccumulative potential | The product is not bioaccumulative. |

## 12.4. Mobility in soil

| | |
|---|---|
| Mobility | No data available. |

### 12.5. Results of PBT and vPvB assessment

| | |
|---|---|
| PBT assessment results | Not Classified as PBT/vPvB by current EU criteria. |

### 12.6. Other adverse effects

| | |
|---|---|
| Environmental details, summation | The product is not classified as hazardous to the environment. Avoid release to the environment. |

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

| | |
|---|---|
| Specify the appropriate methods of disposal | After usage, empty the packing completely. Uncleaned empty containers are to be handled in the same way as the ones containing products. Dispose of empty containers to an approved waste disposal facility for recycling or disposal. |
| Other information | Dispose of in compliance with local and national regulations. |

## SECTION 14: Transport information

### 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

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

### 14.6. Special precautions for user

| | |
|---|---|
| Special safety precautions for user | Avoid generation and spreading of dust. |

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

## SECTION 15: Regulatory information

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

| | |
|---|---|
| Legislation and regulations | No specific regulations. |

### 15.2. Chemical safety assessment

| | |
|---|---|
| Chemical safety assessment performed | No |

## SECTION 16: Other information

| | |
|---|---|
| Training advice | Read safety data sheet. |
| Key literature references and sources for data | Previous version of the SDS<br>SDSs for product components<br>EH40/2005 Workplace exposure limits (3rd ed, 2018) |
| Abbreviations and acronyms used | AF: Assessment factor<br>DNEL: Derived No-Effect Level<br>EC50: Effective concentration: concentration which kills or immobilises 50 % of exposed organisms<br>LC50: Lethal concentration 50 % (median lethal concentration): concentration which kills 50 % of exposed organisms<br>LD50: Lethal dose 50 % (median lethal dose): dose which kills 50 % of exposed organisms<br>NOEC: No Observed Effect Concentration: concentration at which no effects are observed<br>OEL: Occupational exposure limit<br>PNEC: Predicted No-Effect Concentration<br>STEL: Short-term exposure limit.<br>TWA: Time-weighted average |
| Information added, deleted or revised | 21.12.2020: Calcium Carbonate CAS and EC numbers changed.<br>28.2.2019: Safety data sheet revised. Contact information (section 1.3) updated. |
| Version | 2 |
| Comments | Disclaimer<br>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. |