

SAFETY DATA SHEET**Nordkalk****Nordkalk Enrich C, Nordkalk
Enrich A, Nordkalk Enrich P**

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** 26.03.2020**Revision date** 18.11.2022**1.1. Product identifier****Product name** Nordkalk Enrich C, Nordkalk Enrich A, Nordkalk Enrich P**Product definition** Precipitated Calcium Carbonate (PCC) with polycarboxylate as dispersing agent. Also covers the nanoform.**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance / mixture** Additive in paper, paints and coatings, plastics, rubber products, elastomers, adhesives, mastics, sealants, plasters, ceramics, building materials**Main intended use** PC-TEC-OTH Other products for chemical or technical processes**Industrial use** Yes**Professional use** Yes**Consumer use** No**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

| | |
|----------------------------------|--|
| 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. |
| Other hazards | Also covers the nanoform. The product does not contain any known or suspected endocrine disruptors. |

SECTION 3: Composition / information on ingredients

3.2. Mixtures

| Substance | Identification | Classification | Contents | Notes |
|----------------------------------|--|---|------------|-------|
| Calcium carbonate (precipitated) | CAS No.: 471-34-1 EC No.: 207-439-9 REACH Reg. No.: 01-2119486795-18-XXXX | CLP classification, notes: Not classified. | 95 - 100 % | |

| | |
|-----------------------------------|---|
| Description of the mixture | Precipitated Calcium Carbonate (PCC) with polycarboxylate as dispersing agent. Also covers the nanoform. |
|-----------------------------------|---|

| | |
|---------------------------|--|
| Remarks, substance | Name of nanoform: Uncoated nano calcium carbonate Number based particle size distribution: d10: ca. 53 (52-53) nm d50: ca. 79 (78-79) nm d90: ca. 129 (128-129) nm Particle shape and aspect ratio: spherical, ca. 0.95 (0.9-1) Crystallinity: rhombohedral Surface functionalisation / treatment: no coating / treatment |
|---------------------------|--|

| | |
|---------------------------|--|
| | Specific surface area: 22.4 (10-60) m ² /g |
| 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 other symptoms occur, seek medical 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 | None known. |
| 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 | None known. |

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. |

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. Collect product with a vacuum cleaner or sweep it up, 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. Personal protective equipment: see point 8. 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

| | |
|---|---|
| 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 well-ventilated place. Keep cool. Store in a closed container. |
| Conditions to avoid | 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 | Exposure limits | TWA Year |
|-------------------|-------------------|--|----------|
| Dust | | Country of origin: United Kingdom Limit value type: TWA Limit value (8 h) : 4 mg/m ³ Particle fraction: Respirable | |
| | | Country of origin: United Kingdom Limit value type: TWA Limit value (8 h) : 10 mg/m ³ Particle fraction: Inhalable | |
| Calcium carbonate | CAS No.: 471-34-1 | Country of origin: United Kingdom Limit value type: TWA Limit value (8 h) : 10 mg/m ³ Particle fraction: Inhalable | |
| | | Country of origin: United Kingdom Limit value type: TWA Limit value (8 h) : 4 mg/m ³ Particle fraction: Respirable | |

DNEL / PNEC

Substance

Calcium carbonate (precipitated)

DNEL

Group: Professional

Route of exposure: Long-term inhalation (local)

Value: 4,26 mg/m³

Group: Professional

Route of exposure: Long-term inhalation (systemic)

Value: 10 mg/m³

Group: Consumer

Route of exposure: Long-term inhalation (local)

Value: 1,06 mg/m³

Group: Consumer

Route of exposure: Long-term inhalation (systemic)

Value: 10 mg/m³

PNEC

Route of exposure: Sewage treatment plant STP

Value: 100 mg/l

Comments: NOEC; AF=10

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. EN 374.

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. FFP1, FFP2, FFP3 (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. |
| Colour | White. |
| Odour | Odourless or mild odor. |
| Odour limit | Comments: Unknown. |
| pH | Status: In aqueous solution Value: 7 - 10 Comments: 35 % dry matter content Temperature: 20 °C |
| Melting point / melting range | Value: > 450 °C Comments: Calcium carbonate |
| Boiling point / boiling range | Comments: Not determined. |
| Flash point | Comments: Not applicable. |
| Flammability | Not flammable. (UN N.1) |
| Explosion limit | Comments: Not applicable. |

| | |
|--|--|
| Vapour pressure | Comments: Not applicable. |
| Vapour density | Comments: Not applicable. |
| Particle characteristics | Comments: Calcium carbonate: Nanoform. See section 3. |
| Density | Value: 2,70 kg/dm ³ |
| Bulk density | Value: 0,75 kg/dm ³ |
| Solubility | Medium: Water Value: 0,0166 g/l Method: OECD 105 Comments: Calcium carbonate Temperature: 20 °C Medium: Water Comments: Nanoform. Not known. |
| Partition coefficient: n-octanol/ water | Comments: Not applicable. |
| Auto-ignition temperature | Method: UN N.4 Comments: Not self-igniting. |
| Decomposition temperature | Value: > 450 °C Comments: Calcium carbonate |
| Viscosity | Comments: Not applicable. |

9.2. Other information

Physical hazards

| | |
|----------------------|---|
| Particle size | Comments: Nanoform. See section 3 for particle characteristics. |
|----------------------|---|

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. Contact with acids liberates toxic gas. |
|-------------------|---|

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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|---|--|
| 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.

10.5. Incompatible materials

Materials to avoid Acids.

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 hazard classes as defined in Regulation (EC) No 1272/2008

| | |
|---------------------------------|---|
| Substance | Calcium carbonate (precipitated) |
| Acute toxicity | <p>Effect tested: LD50 Route of exposure: Oral Method: OECD 420 Value: > 2000 mg/kg bw Animal test species: Rat</p> <p>Effect tested: LD50 Route of exposure: Dermal Method: OECD 402 Value: > 2000 mg/kg bw Animal test species: Rat</p> <p>Effect tested: LC50 Route of exposure: Inhalation. Method: OECD 403 Duration: 4 hour(s) Value: > 3 mg/l Animal test species: Rat</p> |
| 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 (precipitated) |
| Skin corrosion / irritation test result | <p>Method: In vivo OECD 404 Species: Rabbit Evaluation result: Not irritating.</p> |
| Assessment of skin corrosion / irritation, classification | The product is not classified as irritant or corrosive to skin. |
| Substance | Calcium carbonate (precipitated) |
| Eye damage or irritation, test results | <p>Method: In vivo OECD 405 Species: Rabbit</p> |

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|---|--|
| | Evaluation result: Not irritating. |
| Assessment of eye damage or irritation, classification | The product is not classified as damaging or irritating to eyes. |
| Substance | Calcium carbonate (precipitated) |
| Respiratory or skin sensitisation | Method: OECD 429 Species: Mouse 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. 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. Calcium carbonate: NOEL: 1000 mg/kg bw/d (OECD 422). |
| Assessment of specific target organ toxicity - single exposure, classification | The product is not classified as toxic to specific target organs at a single exposure. |
| Specific target organ toxicity - repeated exposure, test results | Method: OECD 422 Route of exposure: Oral Species: Rat Comments: Calcium carbonate: NOAEL: 1000 mg/kg bw/d Method: OECD 413 Route of exposure: Inhalation. Species: Rat Comments: Calcium carbonate: NOAEC: 0,212 mg/l |
| 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. |
| 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 carbonate (precipitated) |
| Aquatic toxicity, fish | Effect dose concentration: LC50 Test duration: 96 hour(s) Species: Oncorhynchus mykiss Method: OECD 203 Evaluation: >100% v/v saturated solution of test material - Exceeds maximum solubility of substance. |

| | |
|--|---|
| | Comments: Acute toxicity is greater than the highest concentration tested and therefore exceeds the maximum solubility of the product in water. |
| Substance | Calcium carbonate (precipitated) |
| Aquatic toxicity, algae | Value: > 14 mg/l Test duration: 72 hour(s) Species: Desmodesmus subspicatus Method: OECD 201 Comments: EC50 / EC20 / EC10 / NOEC |
| Substance | Calcium carbonate (precipitated) |
| Aquatic toxicity, crustacean | Effect dose concentration: EC50 Test duration: 48 hour(s) Species: Daphnia magna Method: OECD 202 Evaluation: >100% v/v saturated solution of test material - Exceeds maximum solubility of substance. 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 Effect dose concentration: EC50 Test duration: 3 hour(s) Species: Activated sludge Method: OECD 209 Comments: Calcium carbonate |
| | Value: 1000 mg/l Effect dose concentration: NOEC Test duration: 3 hour(s) Species: Activated sludge Method: OECD 209 Comments: Calcium carbonate |
| Toxicity to earthworm | Value: > 1000 mg/kg Effect dose concentration: EC50 Test duration: 14 day(s) Species: Eisenia fetida Method: OECD 207 Comments: Calcium carbonate |
| | Value: 1000 mg/kg Test duration: 14 day(s) Species: Eisenia fetida Method: OECD 207 Comments: Calcium carbonate |
| Toxicity to soil microorganisms | Value: 1000 mg/kg Effect dose concentration: EC50 Test duration: 28 day(s) Species: microorganisms Method: OECD 216 Comments: Calcium carbonate |
| | Value: 1000 mg/kg Effect dose concentration: NOEC |

| | |
|-----------------------|--|
| | <p>Test duration: 28 day(s) Species: microorganisms Method: OECD 216 Comments: Calcium carbonate</p> |
| Plant toxicity | <p>Value: > 1000 mg/kg Effect dose concentration: EC50 Test duration: 21 day(s) Species: Glycine max Lycopersicon esculentum Avena sativa Method: OECD 208 Comments: Calcium carbonate</p> <p>Value: 1000 mg/kg Effect dose concentration: NOEC Test duration: 21 day(s) Species: Glycine max Lycopersicon esculentum Avena sativa Method: OECD 208 Comments: Calcium carbonate</p> |
| Ecotoxicity | The product is not classified as hazardous to the environment. |

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

| | |
|------------------------------------|-------------------------------------|
| Bioaccumulation, evaluation | The product is not bioaccumulative. |
|------------------------------------|-------------------------------------|

12.4. Mobility in soil

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

12.5. Results of PBT and vPvB assessment

| | |
|---|--|
| Results of PBT and vPvB assessment | Not classified as PBT/vPvB by current EU criteria. |
|---|--|

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. Avoid release to the environment. |
|--|--|

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|---|--|
| Appropriate methods of disposal for the chemical | Dispose of in compliance with local and national regulations. |
| 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. Dispose of empty containers to an approved waste disposal facility for recycling or disposal. |

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

| | |
|------------------------------|-----|
| IMDG Marine pollutant | No. |
|------------------------------|-----|

14.6. Special precautions for user

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

14.7. Maritime transport in bulk according to IMO instruments

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 07.10.2020 EH40/2005 Workplace exposure limits (4th ed, 2020) |
| Abbreviations and acronyms used | AF: Assessment factor |

| | |
|--|---|
| | <p>DNEL: Derived No-Effect Level</p> <p>EC50: Effective concentration: concentration which kills or immobilises 50 % of exposed organisms</p> <p>LC50: Lethal concentration 50 % (median lethal concentration): concentration which kills 50 % of exposed organisms</p> <p>LD50: Lethal dose 50 % (median lethal dose): dose which kills 50 % of exposed organisms</p> <p>NOEC: No Observed Effect Concentration: concentration at which no effects are observed</p> <p>OEL: Occupational exposure limit</p> <p>PNEC: Predicted No-Effect Concentration</p> <p>STEL: Short-term exposure limit.</p> <p>TWA: Time-weighted average</p> |
| Information added, deleted or revised | <p>7.10.2020: Safety data sheet revised. Also covers the nanoform.</p> <p>18.11.2022: Update according to Annex II of the REACH Regulation ([EU] 2020/878).</p> |
| Version | 1 |
| Comments | <p>Disclaimer</p> <p>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.</p> |