

Date: 17. January 2005

Former date: 3. March 2004

1. IDENTIFICATION OF THE CHEMICAL AND OF THE MANUFACTURER, IMPORTER OR OTHER UNDERTAKING**1.1 Identification of the substance or preparation**

Trade name Wollastonite Nordkalk FW, several uncoated grades
Wollastonite Nordkalk WICROLL, several uncoated grades

Code of the preparation

1.2 Use of the chemical**1.2.1 The intended uses of the chemical**

Used as raw material in the production of ceramic materials, glazes and metallurgical products and as filler in paints and plastics.

1.2.2 Standard industrial classification (SIC) 243, 252, 262, 263, 271, 275

1.2.3 Use categories (UC62) 14, 20, 24

1.2.4 The chemical can be used by the general public

1.2.5 The chemical is used by the general public only

1.3 Identification of the manufacturer, importer or other undertaking

1.3.1 Manufacturer, importer, other undertaking
Nordkalk Corporation, Paper Pigments

1.3.2 Contact information:

Street address

Postcode and post office FIN-53500 Lappeenranta, Finland

Post office box

Post code and post office

Telephone number + 358 (0)2 04 55 7999

Telefax + 358 (0)2 04 55 7664

Y code 1796277-5

1.3.3 Information on foreign manufacturer

-

1.4 Emergency telephone**1.4.1 Telephone number, name and address**

+ 358 (0)2 04 55 7999
Nordkalk Corporation, Paper Pigments
FIN-53500 Lappeenranta, Finland

2. COMPOSITION AND INFORMATION ON INGREDIENTS**2.1 Hazardous ingredients**

2.1.1 CAS number or other code	2.1.2 Name of the ingredient	2.1.3 Concentration	2.1.4 Warning symbol, R phrases and other data on the ingredient
13983-17-0	Calcium silicate	> 87%	

2.1.5 There has been a request for confidentiality of the substance according to Annex 3 of the decree

2.1.6 Substance not dangerous has been indicated as confidential

2.1.7 Other information

EINECS number: 237-772-5, wollastonite

The product contains less than 1% of free silicate (quartz) in fine fraction (< 5 microns).

3. HAZARDS IDENTIFICATION

Long-term exposure to excessive wollastonite dust may cause minor irritation in the upper airways and on the skin.

May cause mechanical irritation in the eyes.

Not dangerous if swallowed.

The product is not categorised as a hazardous substance by the Finnish Ministry of Social Affairs and Health.

The International Agency for Research on Cancer (IARC) has categorised the product in category 3: "The agent is not classifiable as to carcinogenicity in humans".

4. FIRST AID MEASURES

4.1 Special instructions

-

4.2 Inhalation

Move to fresh air, drink water to clear your throat and blow your nose to remove dust. If irritation persists, seek medical attention.

4.3 Skin contact

Wash with warm water and soap.

4.4 Eye contact

Flush eyes carefully with plenty of water. If irritation persists, seek medical attention.

4.5 Ingestion

No first aid measures are normally required.

4.6 Information to doctor or other trained persons giving first aid

-

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

The product does not burn.

5.2 Extinguishing media which must not be used for safety reasons

No specific instructions, the product does not burn.

5.3 Special exposure hazards in a fire

None.

5.4 Special protective equipment for fire-fighters

No specific instructions.

5.5 Other instructions

-

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Prevent the dust from spreading and use local dust extraction and/or personal respiration protector of at least class FFP2.

6.2 Environmental precautions

No specific instructions. The product is composed of natural minerals.

6.3 Methods for cleaning up

Mechanical cleaning.

Trade name: Wollastonite Nordkalk FW, Wollastonite Nordkalk WICROLL, uncoated grades

Date: 17. January 2005

Former date: 3. March 2004

6.4 Other instructions

-

7. HANDLING AND STORAGE

7.1 Handling

Use enclosed handling equipment and/or sufficient local dust extraction.

7.2 Storage

Store the product in original packaging and in a dry space.

7.3 Specific use(s)

Avoid contact with concentrated acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limit values

8.1.1 OEL values

- 10 mg/m³ (8 h), inorganic dust (wollastonite has no specific OEL value)
- 0.2 mg/m³ (8 h), quartz alveolar fraction (< 5 µm)

8.1.2 Other limit values

-

8.1.3 Limit values in other countries

USA: Wollastonite: **TLV:** 3 mg/m³/8 h TWA/ACGIH
PEL¹⁾: 5 mg/m³
1) OSHA permissible exposure limit

Great Britain: Wollastonite: 10.0 mg/m³/8 h TWA
Fine quartz: 0.4 mg/m³/8 h TWA

Denmark: 1 fibre/cm³ (wollastonite)

Sweden: 0.5 fibres/ml (natural fibres)

Canada, Quebec: 1 fibre/cm³ (wollastonite TWAEV)

Australia: **AICS:** Wollastonite is included in list "Australian Inventory of Chemical Substances, June 1996 Ed."

EEC: **EINECS/ELINCS:** Wollastonite is included in list "EINECS and ELINCS EEC Chemical Inventories"
67/548/EEC: Wollastonite is not classified

Japan: **ENCS:** Wollastonite, being a natural mineral, is excluded from list "Existing and New Chemical Substances"

Korea: **ECL:** Wollastonite is included in list "Korean Existing Chemical List, ECL Number KE-35416"

Philippines: **PICCS:** Wollastonite is included in list "Philippine Inventory of Chemicals and Chemical Substances"

USA: **EPA-TSCA:** Wollastonite, being a natural mineral, is excluded from list "TSCA Inventory"
OSHA: Categorized as a nuisance dust
ACGIH: Categorized as a nuisance dust

8.2 Exposure controls

8.2.1 Occupational exposure controls

Use appropriately enclosed equipment, local/general dust extraction and, if necessary, personal respiration protector.

8.2.1.1 Respiratory protection

Respiration protector fulfilling the requirements of at least class FFP2.

8.2.1.2 Hand protection

Normal protective gloves.

8.2.1.3 Eye protection

Protective goggles with side guards.

Trade name: Wollastonite Nordkalk FW, Wollastonite Nordkalk WICROLL, uncoated grades

Date: 17. January 2005

Former date: 3. March 2004

8.2.1.4 Skin protection

Necessary only for those with sensitive skin.

8.2.2 Environmental exposure controls

-

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information (physical state, colour and odour)

Non-metallic, white and odourless powder.

9.2 Important health, safety and environmental information

9.2.1 pH

10.0 – 11.0 in a water solution.

9.2.2 Boiling point/boiling range

-

9.2.3 Flash point

-

9.2.4 Flammability (solid, gas)

Non-flammable.

9.2.5 Explosive properties

9.2.5.1 Lower explosive limit

-

9.2.5.2 Upper explosive limit

-

9.2.6 Oxidising properties

-

9.2.7 Vapour pressure

-

9.2.8 Relative density

Unprocessed	2.9 kg/dm ³
Processed	0.3 – 1.4 kg/dm ³

9.2.9 Solubility

9.2.9.1 Water solubility

< 0.2 %

9.2.9.2 Fat solubility (solvent-oil, to be specified)

-

9.2.10 Partition coefficient: n-octanol/water

-

9.2.11 Viscosity

-

9.2.12 Vapour density

-

9.2.13 Evaporation rate

-

- 9.3 Other information**
Melting temperature > 1400°C

10. STABILITY AND REACTIVITY

- 10.1 Conditions to avoid**
The product is stable under normal conditions.
- 10.2 Materials to avoid**
Not known.
- 10.3 Hazardous decomposition products**
None.

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity**
The International Agency for Research on Cancer (IARC) has categorised the product in category 3: "The agent is not classifiable as to carcinogenicity in humans".

According to the German MAK Kommission (Research Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area), wollastonite fibres do not have, with all likelihood, any carcinogenic effects.
- 11.2 Irritation and corrosiveness**
-
- 11.3 Sensitisation**
-
- 11.4 Sub-acute, sub-chronic and prolonged toxicity**
-
- 11.5 Empirical data on effects on humans**
There is no evidence that long-term exposure to wollastonite would cause changes in the lung tissue or pleura.
Ref.: Heikki O Koskinen, Henrik L Nordman, Anders J Zitting, Hannu T Suoranta, Sisko L Anttila, Olavi SA Taikina-aho, Ritva A Luukkonen
Fibrosis of the lung and pleura and long-term exposure to wollastonite
Scand J Work Environ Health 1997; 23: 41-7
- 11.6 Other information on health effects**
Wollastonite has a low durability in lung tissue and does not expose carcinogenic potency in intraperitoneal tests.
Ref.: Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area, Report No. 30.
Deutsche Forschungsgemeinschaft

12. ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity**
- 12.1.1 Aquatic toxicity**
Not toxic.
- 12.1.2 Toxicity to other organisms**
Not toxic.
- 12.2 Mobility**
-

Trade name: Wollastonite Nordkalk FW, Wollastonite Nordkalk WICROLL, uncoated grades

Date: 17. January 2005

Former date: 3. March 2004

12.3 Persistence and degradability

12.3.1 Biodegradation

-

12.3.2 Chemical degradation

Chemically non-degradable with the exception of solutions of concentrated acids.

12.4 Bioaccumulative potential

-

12.5 Other adverse effects

-

13. DISPOSAL CONSIDERATIONS

No specific requirements, the product can be disposed of at landfill site or as earthfill in accordance with local regulations and instructions.

Paper/cardboard packaging can be burnt, and big bags can be recycled in accordance with local regulations and instructions.

14. TRANSPORT INFORMATION

14.1 UN number

-

14.2 Packing group

-

14.3 Land transport

14.3.1 Transport class

-

14.3.2 Risk code

-

14.3.3 Name according to bill of freight

-

14.3.4 Other information

-

14.4 Sea transport

14.4.1 IMDG class

-

14.4.2 Correct technical name

-

14.4.3 Other information

-

14.5 Air transport

14.5.1 ICAO/IATA class

ICAO does not classify the product as hazardous.

14.5.2 Correct technical name

-

14.5.3 Other information

-

15.	REGULATORY INFORMATION
15.1	Information on the warning label
15.1.1	Letter code of the warning symbol and indications of danger for the preparation -
15.1.2	Names of the ingredients given on the warning label -
15.1.3	R phrases -
15.1.4	S phrases -
15.1.5	Special regulations on certain preparations -
15.2	National regulations -
16.	OTHER INFORMATION
16.1	List of the relevant R phrases -
16.2	Training advice -
16.3	Restrictions on use -
16.4	Further information If the total content of inorganic dust does not exceed the OEL value (10 mg/m ³), the amount of fine quartz does not exceed the MAC limit value for alveolar level (0,2 mg/m ³) as follows: $1/100 * 10 \text{ mg/m}^3 = 0.1 \text{ mg/m}^3$
16.5	Sources of key data used Heikki O Koskinen, Henrik L Nordman, Anders J Zitting, Hannu T Suoranta, Sisko L Anttila, Olavi SA Taikina-aho, Ritva A Luukkonen Fibrosis of the lung and pleura and long-term exposure to wollastonite Scand J Work Environ Health 1997; 23: 41-7
16.6	Information which has been added, deleted or revised Suppliers division name has been changed from Nordkalk Industrial Minerals to Nordkalk Paper Pigments