

Safety Data Sheet according to Directive 91/155/EC

## **Revision Date: July 2016**

## 1) Identification of the substance/preparation and the company

Trade Name: Cornelissen Fullers Earth

**Application: Artists' Filler** 

Manufacturer/Supplier:

L Cornelissen & Son Ltd 105 Great Russell Street London WC1B 3RY

Tel: 020 7636 1045 Fax: 020 7636 3655

www.cornelissen.com

## 2) Composition/Information on ingredients

#### Substances

| Chemical name       | Common name and synonyms | CAS number              | %                 |
|---------------------|--------------------------|-------------------------|-------------------|
| Bentonite<br>Quartz | x Y x                    | 1302-78-9<br>14808-60-7 | 97 - 100<br>< 3.0 |
|                     |                          |                         |                   |

#### **Composition comments**

Bentonite is a UVCB substance sub-type 4. The purity of the product is 100 % w/w.

Bentonite is composed mainly of smectite group minerals but the composition is varied, as expected for a UVCB substance, and other mineral constituents will be present in small and varying amounts. These minor constituents are not relevant for classification and labelling.

## 3) Hazards Identification

Physical hazards:Not classified.Health hazards:CarcinogenicityCategory 1AEnvironmental hazards:Not classified.OSHA defined hazards:Not classified.Label elements

| Signal word Danger                           |   |
|--|---|
| Hazard statement                             |   |
| H350:  | May cause cancer.   |
| Precautionary statement                      |   |
| Prevention                                   |   |
| P201:<br>P202:                               | Obtain special instructions before use.<br>Do not handle until all safety precautions have  |
| P264:<br>P280:                               | been read and understood.<br>Wash thoroughly after handling.<br>Wear protective gloves/protective clothing/eye<br>protection/face protection. |
| Response                                     | CO'   |
| P308 + P313:                                 | If exposed or concerned: Get medical advice/attention.  |
| Storage                                      |   |
| P405:  | Store locked up.  |
| Disposal                                     | C Y   |
| P501:  | Dispose of contents/container (in accordance with related regulations).   |
| Hazard(s) not otherwise<br>classified (HNOC) | Material can be slippery when wet.  |
| Supplemental information:                    | None.   |

# 4) First Aid Measures

## Description of first aid measures

| Inhalation:   | If dust from the material is inhaled, remove the<br>affected person immediately to fresh air. Call a<br>physician if symptoms develop or persist. |
|---------------|---|
| Ingestion:    | Rinse mouth with water. Get medical attention if<br>symptoms occur. If ingestion of a large amount<br>does occur, seek medical attention.         |
| Skin contact: | Wash off with soap and water. Get medical attention if irritation develops and persists. Take off contaminated clothing and wash before reuse.    |
| Eye contact   | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if  |

present and easy to do. Get medical attention if irritation develops and persists.

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

None known. Direct contact with eyes may cause temporary irritation.

#### Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. No hazards which require special first aid measures.

## 5) Fire Fighting Measures

| Suitable extinguishing media:          | Use fire-extinguishing media appropriate for surrounding materials.   |
|--|---|
| Unsuitable extinguishing media:        | Do not use water jet as an extinguisher, as this will spread the fire.  |
| Specific hazards arising from the cher | mical: The product itself does not burn. No<br>unusual fire or explosion hazards noted. Material<br>can be slippery when wet.         |
| Special protective equipment and pre   | cautions for firefighters: Wear self-contained<br>breathing apparatus and protective clothing.<br>Material can be slippery when wet.  |
| Specific methods:                      | Use standard firefighting procedures and consider<br>the hazards of other involved materials.   |
| General fire hazards:                  | No unusual fire or explosion hazards noted. Non-<br>combustible, substance itself does not burn.<br>Material can be slippery when wet |

## 6 Accidental Release Measures

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

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Avoid inhalation of dust from the spilled material. Use an approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

#### Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect

dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Do not flush into surface water. Do not let product enter drains.

## 7) Handling and Storage

#### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust from this material. Avoid contact with skin and eyes. Should be handled in closed systems, if possible. In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

#### Conditions for safe storage, including any incompatibilities

Protect from moisture. Avoid dust formation. Store locked up. Keep container tightly closed. Store in a well-ventilated place. Guard against dust accumulation of this material. Store away from incompatible materials (see Section 10 of the SDS).

#### Specific end use(s)

Artists' filler

## 8) Exposure/Personal Protection

### Occupational exposure limits

### US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components                                  | Туре  | Value   | Form   |
|---|-------|---|--|
| Quartz (CAS 14808-60-7)                     | TWA   | 0.3 mg/m <sup>3</sup><br>0.1 mg/m <sup>3</sup><br>2.4 mppcf         | Total dust.<br>Respirable.<br>Respirable.                                  |
| Additional components Type                  | Value | Form  |  |
| Nuisance dust.                              | TWA   | 5 mg/m <sup>3</sup><br>15 mg/m <sup>3</sup><br>50 mppcf<br>15 mppcf | Respirable fraction.<br>Total dust.<br>Total dust.<br>Respirable fraction. |
| US. ACGIH Threshold Limit Values            |       |   |  |
| Components                                  | Туре  | Value   | Form   |
| Quartz (CAS 14808-60-7)                     | TWA   | $0.025 \text{ mg/m}^3$  | Respirable fraction.   |
| US. NIOSH: Pocket Guide to Chemical Hazards |       |   |  |
| Components                                  | Туре  | Value   | Form   |

| Quartz (CAS 14808-60-7)                               | TWA  | $0.05  mg/m^3$  | Respirable dust.  |
|---|--|---|---|
|   |  | 0   | 1   |
| Biological limit values:                              | 0  | -   | noted for the ingredient(s).  |
| Exposure guidelines:                                  | -  | respirable crys   | sance dust (total and<br>talline silica should be   |
| Appropriate engineering contr                         | per hour) shou<br>matched to con<br>enclosures, loc  | ld be used. Ver<br>nditions. If app<br>al exhaust vent<br>intain airborne | ion (typically 10 air changes<br>ntilation rates should be<br>licable, use process<br>ilation, or other engineering<br>levels below recommended |
|   | airborne levels<br>be sufficient to                  | to an acceptable<br>effectively rem<br>mes that may b                     | en established, maintain<br>le level. Ventilation should<br>nove and prevent build up of<br>be generated during handling                        |
| Individual protection measured                        | ures, such as p                                      | ersonal protec  | tive equipment  |
| Eye/face protection:                                  |  | usses with side s<br>g goggles if dus                                     |   |
| Skin protection                                       | gloves. Use pro<br>product. Prolo                    | otective skin cre   | priate chemical resistant<br>eam before handling the<br>peated skin contact with this<br>dermatitis.  |
|   | Other: Normal<br>long pants) is r                    |   | (long sleeved shirts and  |
| Respiratory protection:                               |  | e to dust/fume  | ved respirator if there is a e at levels exceeding the  |
| Thermal hazards:                                      | Not available.                                       |   |   |
| General hygiene consideration<br>Protective equipment | Always observe<br>washing after h<br>drinking, and/e | e good persona<br>handling the ma<br>or smoking. Ro                       | Avoid contact with eyes.<br>l hygiene measures, such as<br>uterial and before eating,<br>putinely wash work clothing<br>remove contaminants.    |
| roceave equipment                                     |  |   |   |



## 9) Physical and chemical Properties

Information on basic and physical and chemical properties

| •   | D 1  |  |  |
|---|--|--|--|
| Appearance:                               | Powder.                                    |  |  |
| Physical state:                           | Solid.                                     |  |  |
| Form:                                     | Powder.                                    |  |  |
| Colour:                                   | Off-white.                                 |  |  |
| Odour:                                    | Odourless.                                 |  |  |
| Odour threshold:                          | Not available.                             |  |  |
| pH:                                       | 7.0 - 10.0 in suspension                   |  |  |
| Melting point/freezing                    | g point: Not applicable                    |  |  |
| Initial boiling point an                  | d boiling range: Not applicable            |  |  |
| Flash point:                              | Not applicable                             |  |  |
| Evaporation rate:                         | Not applicable                             |  |  |
| Flammability (solid, ga                   | s): Not available.                         |  |  |
| Upper/lower flammab                       | pility or explosive limits: Not applicable |  |  |
| Vapour pressure:                          | Not applicable                             |  |  |
| Vapour density:                           | Not applicable                             |  |  |
| Relative density:                         | Not available.                             |  |  |
| Solubility (water):                       | Insoluble                                  |  |  |
| Auto-ignition temperature: Not available. |  |  |  |
| Decomposition tempe                       | rature: Not available.                     |  |  |
| Viscosity:                                | Not applicable                             |  |  |
|   |  |  |  |

#### Other information

| Bulk density:     | 800.00 - 1000.00 kg/m <sup>3</sup> |
|-------------------|------------------------------------|
| Density:          | $2.60 \text{ g/cm}^3$              |
| Percent volatile: | 0 % estimated                      |
| Specific gravity: | 2.60                               |

| 10) Stability and Reactivity        | 5  |
|-------------------------------------|--|
| Reactivity:                         | The product is stable and non-reactive under<br>normal conditions of use, storage and transport.   |
| Chemical stability:                 | Material is stable under normal conditions.  |
| Possibility of hazardous reactions: | No dangerous reaction known under conditions<br>of normal use. Hazardous polymerization does<br>not occur.                                       |
| Conditions to avoid:                | Avoid spread of dust. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e. Clearing dust surfaces with compressed air). |
| Incompatible materials:             | None known.  |
| Hazardous decomposition products:   | No dangerous reaction known under conditions<br>of normal use. No hazardous decomposition<br>products are known.                                 |

# 11) Toxicological Information

Information on likely routes of exposure

Inhalation:

Inhalation of dusts may cause respiratory irritation.

Skin contact:No adverse effects due to skin contact are<br/>expected.Eye contact:Dust in the eyes will cause irritation.Ingestion:Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

## Information on toxicological effects

Acute toxicity

| Product  | Species   | Test Results   |  |
|--|---|--|--|
| Acute Inhalation<br>Fullers Earth                              | LC50 Rat  | 204.0816 mg/kg estimated<br>5.3776 mg/l estimated                        |  |
| Oral   | LD50 Rat  | 2040.8163 mg/kg<br>estimated   |  |
| Components   | Species   | Test Results   |  |
| Acute Inhalation   |   |  |  |
| Bentonite (CAS 1302-78-9)                                      | LC50 Rat  | >= 5.27 mg/l (OECD<br>436, rat)  |  |
| Oral   |   |  |  |
|  | LD50 Rat  | > 2000 mg/kg (OECD<br>420, rat)  |  |
| * Estimates for product may be based                           | l on additional compon  | ent data not shown.  |  |
| Skin corrosion/irritation:                                     | Prolonged skin contac<br>irritation.                                      | ct may cause temporary   |  |
| Serious eye damage/eye irritation:                             | Dust in the eyes will c<br>to eyes (according to t<br>Calandra criteria). | ause irritation. Mild irritant<br>the modified Kay &                     |  |
| Respiratory or skin sensitization                              |   |  |  |
| Respiratory sensitization:                                     | Not available.  |  |  |
| Skin sensitization:  | This product is not ex<br>sensitization.                                  | pected to cause skin   |  |
| Germ cell mutagenicity:  |   | ndicate product or any<br>at greater than 0.1% are<br>ic.                |  |
| Carcinogenicity:   | 2   | cupational exposure to<br>spirable crystalline silica<br>and controlled. |  |
| IARC Monographs. Overall Evaluation of Carcinogenicity         |   |  |  |
| Quartz (CAS 14808-60-7) 1:                                     | Carcinogenic to huma  | uns.   |  |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) |   |  |  |

Not listed.

| Not listed.   |                               |  |   |
|---|-------------------------------|--|---|
| US. National  | Toxicology Program (N         | NTP) Report on Carcin  | nogens  |
| Quartz (CAS   | 14808-60-7):                  | Known To Be Hun  | nan Carcinogen.   |
| Reproductive  | toxicity:                     | This product is not reproductive or dev  | -   |
| Specific targe  | t organ toxicity - single     | exposure: Not  | classified.   |
| Specific targe  | t organ toxicity - repeat     | ed exposure: Not   | classified.   |
| Aspiration ha   | zard:                         | Not available.   |   |
| Chronic effec   | :ts:                          | Overexposure to du<br>pneumocononiosis,<br>inhalation of minera<br>fibrotic changes to t<br>respiratory disease of<br>dust, which can lead<br>of the lung tissue. O<br>nuisance dust (total        | e may cause chronic effects.<br>ust may result in<br>, a respiratory disease caused by<br>al dust, which can lead to<br>the lung tissue, or silicosis, a<br>caused by inhalation of silica<br>d to inflammation and fibrosis<br>Decupational exposure to<br>and respirable) and respirable<br>buld be monitored and   |
| 12) Ecologi   | ical Information              |  |   |
|   |                               |  |   |
| Ecotoxicity:  | ~~~                           | hazardous. Howeve<br>possibility that large  | classified as environmentally<br>er, this does not exclude the<br>e or frequent spills can have a<br>ng effect on the environment.  |
| Ecotoxicity:<br>Components  |                               | hazardous. Howeve<br>possibility that large  | er, this does not exclude the<br>or frequent spills can have a  |
| Components  | AS 1302-78-9)                 | hazardous. Howeve<br>possibility that large<br>harmful or damagin  | er, this does not exclude the<br>e or frequent spills can have a<br>ng effect on the environment.   |
| Components  |                               | hazardous. Howeve<br>possibility that large<br>harmful or damagin  | er, this does not exclude the<br>e or frequent spills can have a<br>ng effect on the environment.   |
| <i>Components</i><br>Bentonite (CA  |                               | hazardous. Howeve<br>possibility that large<br>harmful or damagin  | er, this does not exclude the<br>e or frequent spills can have a<br>ng effect on the environment.   |
| <i>Components</i><br>Bentonite (CA<br>Aquatic                               | AS 1302-78-9)                 | hazardous. Howeve<br>possibility that large<br>harmful or damagin<br><i>Species</i><br>Freshwater algae<br>Daphnia   | er, this does not exclude the<br>e or frequent spills can have a<br>ng effect on the environment.<br><i>Test Results</i>  |
| <i>Components</i><br>Bentonite (CA<br>Aquatic<br>Algae                      | AS 1302-78-9)<br>EC50         | hazardous. Howeve<br>possibility that large<br>harmful or damagin<br><i>Species</i><br>Freshwater algae<br>Daphnia   | er, this does not exclude the<br>e or frequent spills can have a<br>ag effect on the environment.<br><i>Test Results</i><br>>= 100 mg/l, 72 hours<br>>= 100 mg/l, 48 hours<br>brate 81.6 mg/l, 96 hours<br>Dungeness crab<br>24.8 mg/l, 96 hours<br>dock shrimp<br>16000 mg/l, 96 hours   |
| <i>Components</i><br>Bentonite (CA<br>Aquatic<br>Algae<br>Crustacea         | AS 1302-78-9)<br>EC50<br>EC50 | hazardous. Howeve<br>possibility that large<br>harmful or damagin<br><i>Species</i><br>Freshwater algae<br>Daphnia<br>Freshwater inverteb<br>Freshwater fish<br>Marine water fish                  | er, this does not exclude the<br>e or frequent spills can have a<br>ag effect on the environment.<br><i>Test Results</i><br>>= 100 mg/l, 72 hours<br>>= 100 mg/l, 48 hours<br>orate 81.6 mg/l, 96 hours<br>Dungeness crab<br>24.8 mg/l, 96 hours<br>dock shrimp<br>16000 mg/l, 96 hours<br>rainbow trout<br>2800 - 3200 mg/l, 24 hours<br>bass, blue gill and sunfish |
| <i>Components</i><br>Bentonite (CA<br>Aquatic<br>Algae<br>Crustacea<br>Fish | AS 1302-78-9)<br>EC50<br>EC50 | hazardous. Howeve<br>possibility that large<br>harmful or damagin<br><i>Species</i><br>Freshwater algae<br>Daphnia<br>Freshwater inverteb<br>Freshwater fish<br>Marine water fish<br>Rainbow Trout | er, this does not exclude the<br>e or frequent spills can have a<br>ag effect on the environment.<br><i>Test Results</i><br>>= 100 mg/l, 72 hours<br>>= 100 mg/l, 48 hours<br>Dungeness crab<br>24.8 mg/l, 96 hours<br>dock shrimp<br>16000 mg/l, 96 hours<br>rainbow trout<br>2800 - 3200 mg/l, 24 hours<br>bass, blue gill and sunfish<br>19000 mg/l, 96 hours      |

Estimates for product may be based on additional component data not shown.

| Persistence and degradability: | The methods for determining the biological    |
|--------------------------------|---|
|                                | degradability are not applicable to inorganic |

|   | substances. Not inherently biodegradable. The<br>product solely consists of inorganic compounds<br>which are not biodegradable. No data is available<br>on the degradability of this product.   |
|---|---|
| Bioaccumulative potential:  | No data available. Not applicable   |
| Mobility in soil  | No data available. Bentonite is almost insoluble<br>and thus presents a low mobility in most soils  |
| Other adverse effects   | No other adverse environmental effects (e.g.<br>ozone depletion, photochemical ozone creation<br>potential, endocrine disruption, global warming<br>potential) are expected from this component. Not<br>expected to be harmful to aquatic organisms.  |
| 12) Dispessel Information   |   |
| <b>13) Disposal Information</b><br>Disposal instructions:                     | Collect and reclaim or dispose in sealed containers<br>at licensed waste disposal site. Dispose of<br>contents/container in accordance with<br>local/regional/national/international regulations.   |
| Local disposal regulations:   | Dispose in accordance with all applicable regulations.  |
| Hazardous waste code:   | The waste code should be assigned in discussion<br>between the user, the producer and the waste<br>disposal company.  |
| Waste from residues/unused products: Material should be recycled if possible. |   |
| the the   | Empty containers or liners may retain some<br>product residues. This material and its container<br>must be disposed of in a safe manner (see:<br>Disposal instructions). Dispose of in accordance<br>with local regulations. Can be landfilled, when in<br>compliance with local regulations. |
| Contaminated packaging:   | Empty containers should be taken to an approved<br>waste handling site for recycling or disposal. Since<br>emptied containers may retain product residue,<br>follow label warnings even after container is<br>emptied.  |

## 14) Transport Information

Transport class:

This product is not classified for transport.

## 15) Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:  $$\rm N/A$$ 

Chemical Safety Assessment:

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## 16) Other information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

#### **Further Information**

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)

According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist