1 Identification

- Product identifier
- Trade name: Super Flowcrete
- Article number: SFC

- Recommended use and restriction on use
- Recommended use: Concrete surfacer
- Restrictions on use: No further relevant information available.

- Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier:
  Lyons Manufacturing, Inc
  8900 Forney Rd
  Dallas, TX 75227
  (214) 381-8100
- Emergency telephone number:
  ChemTel Inc.
  (800)255-3924, +1 (813)248-0585

2 Hazard(s) Identification

- Classification of the substance or mixture
  - GHS08 Health hazard
  - Carc. 1A  H350  May cause cancer.
  - GHS05 Corrosion
  - Eye Dam. 1  H318  Causes serious eye damage.
  - GHS07
  - Skin Irrit. 2  H315  Causes skin irritation.
  - Skin Sens. 1  H317  May cause an allergic skin reaction.
  - STOT SE 3  H335  May cause respiratory irritation.

- Additional information:
  There are no other hazards not otherwise classified that have been identified.
  0 percent of the mixture consists of ingredient(s) of unknown toxicity.

- Label elements
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    - GHS05 GHS07 GHS08

(Contd. on page 2)
Trade name: Super Flowcrete

- Signal word Danger

- Hazard-determining components of labeling:
  Cement, portland, chemicals
  Quartz (SiO2)
  calcium dihydroxide

- Hazard statements
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
  H317 May cause an allergic skin reaction.
  H350 May cause cancer.
  H335 May cause respiratory irritation.

- Precautionary statements
  P201 Obtain special instructions before use.
  P202 Do not handle until all safety precautions have been read and understood.
  P261 Avoid breathing dust.
  P264 Wash thoroughly after handling.
  P280 Wear protective gloves/protective clothing/eye protection.
  P271 Use only outdoors or in a well-ventilated area.
  P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P362 Take off contaminated clothing and wash before reuse.
  P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  P308+P313 IF exposed or concerned: Get medical advice/attention.
  P302+P352 If on skin: Wash with plenty of water.
  P403+P233 Store in a well-ventilated place. Keep container tightly closed.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazard description:

- WHMIS-symbols:
  As of 11 February 2015, the current WHMIS system is being replaced by the GHS system. This is the classification under the older system.
  D2A - Very toxic material causing other toxic effects

- Classification system:

  - NFPA ratings (scale 0 - 4)
    Health = 3
    Fire = 0
    Reactivity = 0

  - HMIS-ratings (scale 0 - 4)
    HEALTH: Health = *3
    FIRE: Fire = 0
    REACTIVITY: Reactivity = 0

    * - Indicates a long term health hazard from repeated or prolonged exposures.
3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Substance</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>25-50%</td>
</tr>
<tr>
<td>65997-15-1 Cement, portland, chemicals</td>
<td>25-50%</td>
</tr>
<tr>
<td>65997-16-2 Cement, alumina, chemicals</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>1305-62-0 Calcium dihydroxide</td>
<td>≤ 2.5%</td>
</tr>
</tbody>
</table>

Additional information:
For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

4 First-aid measures

- Description of first aid measures
- General information:
Immediately remove any clothing soiled by the product.
Take affected persons out into the fresh air.
- After inhalation:
Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- After skin contact:
Brush off loose particles from skin.
Immediately remove any clothing soiled by the product.
Immediately rinse with water.
If skin irritation or rash occurs: Get medical advice/attention.
- After eye contact:
Protect unharmed eye.
Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.


Trade name: Super Flowcrete

\begin{itemize}
  \item Information for doctor:
  \begin{itemize}
    \item Most important symptoms and effects, both acute and delayed
    Breathing difficulty
    Coughing
    Allergic reactions
    Irritant to skin and mucous membranes.
    Strong irritant with the danger of severe eye injury.
    May cause respiratory irritation.
    Gastric or intestinal disorders when ingested.
    Nausea in case of ingestion.
    \textbf{Danger} Danger of impaired breathing.
    \item Indication of any immediate medical attention and special treatment needed
    Medical supervision for at least 48 hours.
    If necessary oxygen respiration treatment.
    Treat skin and mucous membrane with antihistamine and corticoid preparations.
    Contains Cement, portland, chemicals. May produce an allergic reaction.
  \end{itemize}
\end{itemize}

\section*{5 Fire-fighting measures}

\begin{itemize}
  \item Extinguishing media
  \item Suitable extinguishing agents:
    The product is not flammable.
    Use fire fighting measures that suit the environment.
  \item For safety reasons unsuitable extinguishing agents: None.
  \item Special hazards arising from the substance or mixture
    Formation of toxic gases is possible during heating or in case of fire.
  \item Advice for firefighters
  \item Protective equipment:
    Wear self-contained respiratory protective device.
    Wear fully protective suit.
  \item Additional information No further relevant information available.
\end{itemize}

\section*{6 Accidental release measures}

\begin{itemize}
  \item Personal precautions, protective equipment and emergency procedures
    Use respiratory protective device against the effects of fumes/dust/aerosol.
    Ensure adequate ventilation.
    Avoid formation of dust.
    Do not breathe dust.
    Wear protective equipment. Keep unprotected persons away.
  \item Environmental precautions:
    Do not allow to enter sewers/ surface or ground water.
    Damp down dust with water spray.
  \item Methods and material for containment and cleaning up:
    Pick up mechanically.
    Dispose contaminated material as waste according to item 13.
    Send for recovery or disposal in suitable receptacles.
\end{itemize}

(Contd. on page 5)
7 Handling and storage

- Handling:
  - Precautions for safe handling
    Use only in well ventilated areas.
    Prevent formation of dust.
    Any deposit of dust which cannot be avoided must be regularly removed.
  - Information about protection against explosions and fires:
    Keep respiratory protective device available.

- Conditions for safe storage, including any incompatibilities

- Storage:
  - Requirements to be met by storerooms and receptacles:
    Store only in the original receptacle.
    Protect from humidity and water.
  - Information about storage in one common storage facility:
    Store away from foodstuffs.
    Do not store together with acids.
    Store away from water.
  - Further information about storage conditions:
    Store in cool, dry conditions in well sealed receptacles.
    Keep receptacle tightly sealed.

- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>see Quartz listing</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 0.05* mg/m³</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 0.025* mg/m³</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 0.025 mg/m³</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 0.10* mg/m³</td>
</tr>
</tbody>
</table>

*respirable fraction
### Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200)

**Trade name:** Super Flowcrete

<table>
<thead>
<tr>
<th>LMPE (Mexico)</th>
<th>Long-term value: 0.025* mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A2, *fracción respirable</td>
</tr>
</tbody>
</table>

**65997-15-1 Cement, portland, chemicals**

<table>
<thead>
<tr>
<th>PEL (USA)</th>
<th>Long-term value: 50 mppcf or 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 1* mg/m³</td>
</tr>
<tr>
<td></td>
<td>E: *as respirable fraction</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 10* 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust;**respirable fraction</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 10(D) mg/m³</td>
</tr>
<tr>
<td></td>
<td>total dust</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 1* mg/m³</td>
</tr>
<tr>
<td></td>
<td>A4, *fracción respirable</td>
</tr>
</tbody>
</table>

**7778-18-9 calcium sulphate, natural**

<table>
<thead>
<tr>
<th>PEL (USA)</th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 10* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as inhalable fraction</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>inhalable</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 10(D) mg/m³</td>
</tr>
<tr>
<td></td>
<td>total dust</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 10* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*fracción inhalable</td>
</tr>
</tbody>
</table>

**1332-58-7 Kaolin**

<table>
<thead>
<tr>
<th>PEL (USA)</th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 2* mg/m³</td>
</tr>
<tr>
<td></td>
<td>E: as respirable fraction</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 2 mg/m³</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 2(D) mg/m³</td>
</tr>
<tr>
<td></td>
<td>respirable</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 2* mg/m³</td>
</tr>
<tr>
<td></td>
<td>A4, *fracción respirable</td>
</tr>
</tbody>
</table>

**1305-62-0 calcium dihydroxide**

<table>
<thead>
<tr>
<th>PEL (USA)</th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 5 mg/m³</td>
</tr>
</tbody>
</table>

(Contd. of page 5)
Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 06/08/2015
Reviewed on 06/08/2015

Trade name: Super Flowcrete

| TLV (USA) | Long-term value: 5 mg/m³ |
| EL (Canada) | Long-term value: 5 mg/m³ |
| EV (Canada) | Long-term value: 5 mg/m³ |
| LMPE (Mexico) | Long-term value: 5 mg/m³ |
| 65997-16-2 Cement, alumina, chemicals (5-10%) |
| PEL (USA) | Long-term value: 10* 5** mg/m³ |

*total fraction **respirable fraction

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    The usual precautionary measures for handling chemicals should be followed.
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Do not inhale dust / smoke / mist.
    Avoid contact with the eyes and skin.
- **Engineering controls:** No further relevant information available.
- **Breathing equipment:**
  Suitable respiratory protective device recommended.
  Use suitable respiratory protective device in case of insufficient ventilation.
  For spills, respiratory protection may be advisable.
  Particulate mask should filter at least 99% of airborne particles.
- **Protection of hands:**
  - Protective gloves
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Eye protection:**
  Contact lenses should not be worn.
  - Safety glasses
- **Body protection:** Protective work clothing
  - Limitation and supervision of exposure into the environment Avoid release to the environment.
  - Risk management measures See Section 7 for additional information.

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
  - Form: Powder
  - Color: Light grey
  - Odor: Odorless

(Contd. of page 6)
Trade name: Super Flowcrete

· Odor threshold: Not determined.
· pH-value at 20 °C (68 °F): 9-11 (in solution)
· Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: Undetermined.
· Flash point: Not applicable.
· Flammability (solid, gaseous): Product is not flammable.
· Auto-ignition temperature: Not determined.
· Decomposition temperature: Not determined.
· Auto igniting: Product is not self-igniting.
· Danger of explosion: Product does not present an explosion hazard.
· Explosion limits:
  Lower: Not determined.
  Upper: Not determined.
· Vapor pressure: Not applicable.
· Density: Not determined.
· Relative density: Not determined.
· Vapour density: Not applicable.
· Evaporation rate: Not applicable.
· Solubility in / Miscibility with
  Water: Slowly reacts with water.
· Partition coefficient (n-octanol/water): Not determined.
· Viscosity:
  Dynamic: Not applicable.
  Kinematic: Not applicable.
· Other information No further relevant information available.

10 Stability and reactivity

· Reactivity
  Chemical stability
  Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.
  Possibility of hazardous reactions
  Toxic fumes may be released if heated above the decomposition point.
  Exothermic reaction with acids.
  Reacts with strong acids and oxidizing agents.
  Reacts with water.
· Conditions to avoid
  Avoid acids.
  Moisture.
Trade name: Super Flowcrete

- Incompatible materials: No further relevant information available.
- Hazardous decomposition products:
  - Carbon monoxide and carbon dioxide
  - Sulfur oxides (SOx)

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
  - LD/LC50 values that are relevant for classification: None.
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Strong irritant with the danger of severe eye injury.
  - Sensitization:
    Sensitization possible through skin contact.
    Contains Cement, portland, chemicals. May produce an allergic reaction.
  - Subacute to chronic toxicity: No further relevant information available.
  - Additional toxicological information:
    Irritant
    Danger through skin absorption.
    Toxic and/or corrosive effects may be delayed up to 24 hours.

- Carcinogenic categories
  - NTP (National Toxicology Program)
    14808-60-7 Quartz (SiO2) K
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

  - Probable Routes of Exposure
    Inhalation.
    Eye contact.
    Skin contact.
    Ingestion.
  - Acute effects (acute toxicity, irritation and corrosivity):
    Irritating to respiratory system.
    Irritating to skin.
  - Repeated Dose Toxicity:
    May cause cancer.
    Repeated exposures may result in skin and/or respiratory sensitivity.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability No further relevant information available.
  - Behavior in environmental systems:
  - Bioaccumulative potential No further relevant information available.
  - Mobility in soil No further relevant information available.

(Contd. on page 10)
Trade name: Super Flowcrete

- Additional ecological information:
  - General notes:
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
  - Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Contact waste processors for recycling information.
    The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
  - Uncleaned packagings:
    - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
- DOT, ADR, ADN, IMDG, IATA Not Regulated
- UN proper shipping name
- DOT, ADR, ADN, IMDG, IATA Not Regulated
- Transport hazard class(es)
- DOT, ADR, ADN, IMDG, IATA Not Regulated
- Class Not Regulated
- Packing group Not Regulated
- DOT, ADR, IMDG, IATA Not Regulated
- Environmental hazards:
- Marine pollutant: No
- Special precautions for user Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
- UN "Model Regulation": -
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
  - SARA
    - Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings):
      None of the ingredients are listed.
    - TSCA (Toxic Substances Control Act):
      All ingredients are listed.
    - Proposition 65 (California)
      - Chemicals known to cause cancer:
        14808-60-7 Quartz (SiO2)
      - Chemicals known to cause reproductive toxicity for females:
        None of the ingredients are listed.
      - Chemicals known to cause reproductive toxicity for males:
        None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      554-13-2 lithium carbonate
  - Carcinogenic categories
    - EPA (Environmental Protection Agency)
      None of the ingredients is listed.
    - IARC (International Agency for Research on Cancer)
      14808-60-7 Quartz (SiO2)
    - TLV (Threshold Limit Value established by ACGIH)
      14808-60-7 Quartz (SiO2)
      1332-58-7 Kaolin
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      14808-60-7 Quartz (SiO2)
  - State Right to Know Listings
    None of the ingredients is listed.
    - D2A - Very toxic material causing other toxic effects
  - Canadian substance listings:
    - Canadian Domestic Substances List (DSL)
      All ingredients are listed.
    - Canadian Ingredient Disclosure list (limit 0.1%)
      None of the ingredients is listed.
    - Canadian Ingredient Disclosure list (limit 1%)
      14808-60-7 Quartz (SiO2)

(Contd. on page 12)
Safety Data Sheet  
acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 06/08/2015  Reviewed on 06/08/2015

Trade name: Super Flowcrete

1305-62-0 calcium dihydroxide

- Other regulations, limitations and prohibitive regulations
  This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Date of preparation / last revision 06/08/2015 / -

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  WHMIS: Workplace Hazardous Materials Information System (Canada)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
  Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
  Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
  Carc. 1A: Carcinogenicity, Hazard Category 1A
  STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- Sources
  SDS Prepared by:
  ChemTel Inc.
  1305 North Florida Avenue
  Tampa, Florida USA 33602-2902
  Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
  Website: www.chemtelinc.com