



EUCLID CHEMICAL

Version: 4.0  
Revision Date: 11/14/2016

# SAFETY DATA SHEET

## 1. Identification

**Material name:** HI - FLOW GROUT  
**Material:** 088H 50

### Recommended use and restriction on use

**Recommended use:** Cement, Portland, chemicals  
**Restrictions on use:** Not known.

### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| <b>Contact person:</b>             | EH&S Department                              |
| <b>Telephone:</b>                  | 216-531-9222                                 |
| <b>Emergency telephone number:</b> | 1-800-424-9300 (US); 1-613-996-6666 (Canada) |

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

|                                                  |             |
|--------------------------------------------------|-------------|
| Skin Corrosion/Irritation                        | Category 2  |
| Serious Eye Damage/Eye Irritation                | Category 1  |
| Skin sensitizer                                  | Category 1  |
| Carcinogenicity                                  | Category 1A |
| Specific Target Organ Toxicity - Single Exposure | Category 3  |

#### Unknown toxicity - Health

|                                          |         |
|------------------------------------------|---------|
| Acute toxicity, oral                     | 92.07 % |
| Acute toxicity, dermal                   | 94.86 % |
| Acute toxicity, inhalation, vapor        | 100 %   |
| Acute toxicity, inhalation, dust or mist | 99.21 % |

#### Unknown toxicity - Environment

|                                            |         |
|--------------------------------------------|---------|
| Acute hazards to the aquatic environment   | 98.27 % |
| Chronic hazards to the aquatic environment | 100 %   |

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Causes skin irritation.  
Causes serious eye damage.  
May cause an allergic skin reaction.  
May cause cancer.  
May cause respiratory irritation.

**Precautionary Statements:**  
**Prevention:**

Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

**Storage:** Store locked up. Store in well-ventilated place. Keep container tightly closed.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

### 3. Composition/information on ingredients

#### Mixtures

| Chemical Identity                           | CAS number | Content in percent (%)* |
|---------------------------------------------|------------|-------------------------|
| Crystalline Silica (Quartz)/<br>Silica Sand | 14808-60-7 | 50 - <100%              |
| Portland cement                             | 65997-15-1 | 20 - <50%               |
| Silica, fused                               | 60676-86-0 | 10 - <20%               |
| Fumed silica                                | 69012-64-2 | 1 - <5%                 |
| Calcium salt                                | 7778-18-9  | 1 - <5%                 |

|                |           |           |
|----------------|-----------|-----------|
| Calcium oxide  | 1305-78-8 | 0.1 - <1% |
| Aluminum oxide | 1344-28-1 | 0.1 - <1% |
| Iron oxide     | 1309-37-1 | 0.1 - <1% |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

|                      |                                                                                                                                                                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ingestion:</b>    | Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.                                                                                                                                                                                        |
| <b>Inhalation:</b>   | Move to fresh air.                                                                                                                                                                                                                                      |
| <b>Skin Contact:</b> | Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention. |
| <b>Eye contact:</b>  | Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.                                                                                            |

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

|                  |                                                                                                                                                                                                                   |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms:</b> | Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing. Respiratory tract irritation. |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

|                   |                          |
|-------------------|--------------------------|
| <b>Treatment:</b> | Symptoms may be delayed. |
|-------------------|--------------------------|

#### 5. Fire-fighting measures

|                              |                                             |
|------------------------------|---------------------------------------------|
| <b>General Fire Hazards:</b> | No unusual fire or explosion hazards noted. |
|------------------------------|---------------------------------------------|

#### Suitable (and unsuitable) extinguishing media

|                                        |                                                                        |
|----------------------------------------|------------------------------------------------------------------------|
| <b>Suitable extinguishing media:</b>   | Use fire-extinguishing media appropriate for surrounding materials.    |
| <b>Unsuitable extinguishing media:</b> | Do not use water jet as an extinguisher, as this will spread the fire. |

|                                                    |                                                       |
|----------------------------------------------------|-------------------------------------------------------|
| <b>Specific hazards arising from the chemical:</b> | During fire, gases hazardous to health may be formed. |
|----------------------------------------------------|-------------------------------------------------------|

#### Special protective equipment and precautions for firefighters

|                                                        |                                                                                               |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Special fire fighting procedures:</b>               | No data available.                                                                            |
| <b>Special protective equipment for fire-fighters:</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |

## 6. Accidental release measures

|                                                                             |                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures:</b> | See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. |
| <b>Methods and material for containment and cleaning up:</b>                | Collect spillage in containers, seal securely and deliver for disposal according to local regulations.                                                                                            |
| <b>Notification Procedures:</b>                                             | In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.                                                                         |
| <b>Environmental Precautions:</b>                                           | Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.                                                                                                  |

## 7. Handling and storage

|                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling:</b>                                | Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Wash hands thoroughly after handling. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. |
| <b>Conditions for safe storage, including any incompatibilities:</b> | Store locked up.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

| Chemical Identity                                               | type | Exposure Limit Values                           | Source                                                                      |
|-----------------------------------------------------------------|------|-------------------------------------------------|-----------------------------------------------------------------------------|
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA  | 0.025 mg/m <sup>3</sup>                         | US. ACGIH Threshold Limit Values (2011)                                     |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable.          | TWA  | 2.4 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                |
|                                                                 | TWA  | 0.1 mg/m <sup>3</sup>                           | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                |
| Crystalline Silica (Quartz)/ Silica Sand                        | PEL  | 0.05 mg/m <sup>3</sup>                          | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016) |
| Portland cement - Respirable fraction.                          | TWA  | 1 mg/m <sup>3</sup>                             | US. ACGIH Threshold Limit Values (2011)                                     |
| Portland cement - Total                                         | PEL  | 15 mg/m <sup>3</sup>                            | US. OSHA Table Z-1 Limits for Air                                           |



|                                        |        |                                                |                                                                                           |
|----------------------------------------|--------|------------------------------------------------|-------------------------------------------------------------------------------------------|
| dust.                                  |        |                                                | Contaminants (29 CFR 1910.1000) (02 2006)                                                 |
| Portland cement - Respirable fraction. | PEL    | 5 mg/m <sup>3</sup>                            | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)               |
| Portland cement                        | TWA    | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                              |
| Silica, fused                          | TWA    | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                              |
|                                        | TWA    | 0.8 mg/m <sup>3</sup>                          | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                              |
| Fumed silica                           | TWA    | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                              |
|                                        | TWA    | 0.8 mg/m <sup>3</sup>                          | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                              |
| Calcium salt - Inhalable fraction.     | TWA    | 10 mg/m <sup>3</sup>                           | US. ACGIH Threshold Limit Values (2011)                                                   |
| Calcium salt - Total                   | REL    | 10 mg/m <sup>3</sup>                           | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                                        |
| Calcium salt - Respirable.             | REL    | 5 mg/m <sup>3</sup>                            | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                                        |
| Calcium salt - Total dust.             | PEL    | 15 mg/m <sup>3</sup>                           | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)               |
| Calcium salt - Respirable fraction.    | PEL    | 5 mg/m <sup>3</sup>                            | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)               |
| Calcium salt - Total dust.             | TWA    | 15 mg/m <sup>3</sup>                           | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                                            |
| Calcium salt - Respirable fraction.    | TWA    | 5 mg/m <sup>3</sup>                            | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                                            |
| Calcium salt - Total dust.             | TWA    | 15 mg/m <sup>3</sup>                           | US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)                    |
| Calcium salt - Respirable fraction.    | TWA    | 5 mg/m <sup>3</sup>                            | US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)                    |
| Calcium salt                           | AN ESL | 5 µg/m <sup>3</sup>                            | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2014) |
|                                        | ST ESL | 50 µg/m <sup>3</sup>                           | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2014) |
| Calcium oxide                          | TWA    | 2 mg/m <sup>3</sup>                            | US. ACGIH Threshold Limit Values (2011)                                                   |
|                                        | PEL    | 5 mg/m <sup>3</sup>                            | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)               |
| Aluminum oxide - Respirable fraction.  | TWA    | 1 mg/m <sup>3</sup>                            | US. ACGIH Threshold Limit Values (2011)                                                   |



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|                                   |     |          |                                                                             |
|-----------------------------------|-----|----------|-----------------------------------------------------------------------------|
|                                   | PEL | 5 mg/m3  | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Aluminum oxide - Total dust.      | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Iron oxide - Respirable fraction. | TWA | 5 mg/m3  | US. ACGIH Threshold Limit Values (2011)                                     |
| Iron oxide - Fume.                | PEL | 10 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |



| Chemical name                                                   | type | Exposure Limit Values   | Source                                                                                                                                                        |
|-----------------------------------------------------------------|------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA  | 0.025 mg/m <sup>3</sup> | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA  | 0.10 mg/m <sup>3</sup>  | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)                                                                        |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.     | TWA  | 0.1 mg/m <sup>3</sup>   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)                                                |
| Portland cement - Total dust.                                   | TWA  | 10 mg/m <sup>3</sup>    | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Portland cement - Respirable fraction.                          | TWA  | 3 mg/m <sup>3</sup>     | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Portland cement                                                 | TWA  | 10 mg/m <sup>3</sup>    | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)                                                                        |
| Portland cement - Total dust.                                   | TWA  | 10 mg/m <sup>3</sup>    | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)                                                |
| Portland cement - Respirable dust.                              | TWA  | 5 mg/m <sup>3</sup>     | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)                                                |
| Silica, fused - Respirable.                                     | TWA  | 0.1 mg/m <sup>3</sup>   | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)                                                                        |
| Silica, fused - Respirable dust.                                | TWA  | 0.1 mg/m <sup>3</sup>   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)                                                |
| Fumed silica - Total fume.                                      | TWA  | 4 mg/m <sup>3</sup>     | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Fumed silica - Respirable fume.                                 | TWA  | 1.5 mg/m <sup>3</sup>   | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Fumed silica -                                                  | TWA  | 2 mg/m <sup>3</sup>     | Canada. Ontario OELs. (Control of                                                                                                                             |



|                                             |     |          |                                                                                                                                                               |
|---------------------------------------------|-----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Respirable.                                 |     |          | Exposure to Biological or Chemical Agents) (11 2010)                                                                                                          |
| Fumed silica - Respirable dust and/or fume. | TWA | 2 mg/m3  | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)                                                |
| Calcium salt                                | TWA | 10 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)                                                                       |
| Calcium salt - Inhalable                    | TWA | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Calcium salt - Inhalable fraction.          | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)                                                                        |
| Calcium salt - Total dust.                  | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)                                                |
| Calcium salt - Respirable dust.             | TWA | 5 mg/m3  | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)                                                |

**Appropriate Engineering Controls**

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

**Individual protection measures, such as personal protective equipment****General information:**

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye/face protection:**

Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

**Skin Protection****Hand Protection:**

Use suitable protective gloves if risk of skin contact.

**Other:**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:**

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

|                                                              |                      |
|--------------------------------------------------------------|----------------------|
| <b>Physical state:</b>                                       | solid                |
| <b>Form:</b>                                                 | Powder               |
| <b>Color:</b>                                                | Gray                 |
| <b>Odor:</b>                                                 | Odorless             |
| <b>Odor threshold:</b>                                       | No data available.   |
| <b>pH:</b>                                                   | No data available.   |
| <b>Melting point/freezing point:</b>                         | No data available.   |
| <b>Initial boiling point and boiling range:</b>              | No data available.   |
| <b>Flash Point:</b>                                          | No data available.   |
| <b>Evaporation rate:</b>                                     | No data available.   |
| <b>Flammability (solid, gas):</b>                            | No                   |
| <b>Upper/lower limit on flammability or explosive limits</b> |                      |
| <b>Flammability limit - upper (%):</b>                       | No data available.   |
| <b>Flammability limit - lower (%):</b>                       | No data available.   |
| <b>Explosive limit - upper (%):</b>                          | No data available.   |
| <b>Explosive limit - lower (%):</b>                          | No data available.   |
| <b>Vapor pressure:</b>                                       | No data available.   |
| <b>Vapor density:</b>                                        | No data available.   |
| <b>Relative density:</b>                                     | 2.9                  |
| <b>Solubility(ies)</b>                                       |                      |
| <b>Solubility in water:</b>                                  | Miscible with water. |
| <b>Solubility (other):</b>                                   | No data available.   |
| <b>Partition coefficient (n-octanol/water):</b>              | No data available.   |
| <b>Auto-ignition temperature:</b>                            | No data available.   |
| <b>Decomposition temperature:</b>                            | No data available.   |
| <b>Viscosity:</b>                                            | No data available.   |

## 10. Stability and reactivity

|                                            |                                             |
|--------------------------------------------|---------------------------------------------|
| <b>Reactivity:</b>                         | No data available.                          |
| <b>Chemical Stability:</b>                 | Material is stable under normal conditions. |
| <b>Possibility of hazardous reactions:</b> | No data available.                          |
| <b>Conditions to avoid:</b>                | Avoid heat or contamination.                |
| <b>Incompatible Materials:</b>             | No data available.                          |

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|                                          |                                                                                                 |
|------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Hazardous Decomposition Products:</b> | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |
|------------------------------------------|-------------------------------------------------------------------------------------------------|

|                                      |
|--------------------------------------|
| <b>11. Toxicological information</b> |
|--------------------------------------|

**Information on likely routes of exposure**

|                      |                                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------|
| <b>Ingestion:</b>    | May be ingested by accident. Ingestion may cause irritation and malaise.                      |
| <b>Inhalation:</b>   | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| <b>Skin Contact:</b> | Causes skin irritation. May cause an allergic skin reaction.                                  |
| <b>Eye contact:</b>  | Causes serious eye damage.                                                                    |

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

|                 |                        |
|-----------------|------------------------|
| <b>Oral</b>     |                        |
| <b>Product:</b> | ATEmix: 7,744.64 mg/kg |

|                 |                    |
|-----------------|--------------------|
| <b>Dermal</b>   |                    |
| <b>Product:</b> | No data available. |

|                   |                    |
|-------------------|--------------------|
| <b>Inhalation</b> |                    |
| <b>Product:</b>   | No data available. |

|                               |                    |
|-------------------------------|--------------------|
| <b>Repeated dose toxicity</b> |                    |
| <b>Product:</b>               | No data available. |

|                                  |                    |
|----------------------------------|--------------------|
| <b>Skin Corrosion/Irritation</b> |                    |
| <b>Product:</b>                  | No data available. |

|                                |                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Specified substance(s):</b> |                                                                                                                      |
| Fumed silica                   | in vivo (Rabbit): Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study |
| Calcium salt                   | in vivo (Rabbit): Experimental result, Key study                                                                     |
| Calcium oxide                  | in vivo (Rabbit): Read-across from supporting substance (structural analogue or surrogate), Key study                |
| Aluminum oxide                 | in vivo (Rabbit): Experimental result, Key study                                                                     |

Iron oxide in vivo (Rabbit): Experimental result, Weight of Evidence study

**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Specified substance(s):**

Calcium salt in vivo (Rabbit, 72 hrs): Not irritating

Calcium oxide in vivo (Rabbit, 24 hrs): Category 1

Aluminum oxide in vivo (Rabbit, 24 hrs): Not irritating

Iron oxide in vivo (Rabbit, 1 - 72 hrs): Not irritating

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Carcinogenicity**

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Crystalline Silica (Quartz)/ Silica Sand Overall evaluation: Carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

Crystalline Silica (Quartz)/ Silica Sand Known To Be Human Carcinogen.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

|                                   |
|-----------------------------------|
| <b>12. Ecological information</b> |
|-----------------------------------|

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

Calcium salt LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): > 1,970 mg/l  
Mortality

**Aquatic Invertebrates**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Mobility in Soil:** No data available.

**Other Adverse Effects:** No data available.

**13. Disposal considerations**

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

**14. Transport information**

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate (Acute) Health Hazards

Delayed (Chronic) Health Hazard

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

| <u>Chemical Identity</u>                    | <u>Threshold Planning Quantity</u> |
|---------------------------------------------|------------------------------------|
| Crystalline Silica (Quartz)/<br>Silica Sand | 500 lbs                            |
| Portland cement                             | 500 lbs                            |
| Silica, fused                               | 500 lbs                            |
| Fumed silica                                | 500 lbs                            |
| Calcium salt                                | 500 lbs                            |
| Calcium oxide                               | 500 lbs                            |
| Aluminum oxide                              | 500 lbs                            |
| Iron oxide                                  | 500 lbs                            |

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

**US. New Jersey Worker and Community Right-to-Know Act**

| <u>Chemical Identity</u>                 |
|------------------------------------------|
| Crystalline Silica (Quartz)/ Silica Sand |
| Portland cement                          |
| Silica, fused                            |
| Fumed silica                             |
| Calcium salt                             |

**US. Massachusetts RTK - Substance List**

| <u>Chemical Identity</u>                 |
|------------------------------------------|
| Crystalline Silica (Quartz)/ Silica Sand |
| Portland cement                          |
| Silica, fused                            |
| Fumed silica                             |
| Calcium salt                             |

**US. Pennsylvania RTK - Hazardous Substances****Chemical Identity**

Crystalline Silica (Quartz)/ Silica Sand  
Portland cement  
Silica, fused  
Fumed silica  
Calcium salt

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**Other Regulations:**

|                                                            |        |
|------------------------------------------------------------|--------|
| <b>Regulatory VOC (less water<br/>and exempt solvent):</b> | 0 g/l  |
| <b>VOC Method 310:</b>                                     | 0.00 % |

**Inventory Status:**

|                                          |                                                                                        |
|------------------------------------------|----------------------------------------------------------------------------------------|
| Australia AICS:                          | All components in this product are listed on or exempt from the Inventory.             |
| Canada DSL Inventory List:               | All components in this product are listed on or exempt from the Inventory.             |
| EINECS, ELINCS or NLP:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| China Inv. Existing Chemical Substances: | All components in this product are listed on or exempt from the Inventory.             |
| Korea Existing Chemicals Inv. (KECI):    | All components in this product are listed on or exempt from the Inventory.             |
| Canada NDSL Inventory:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory:                       | All components in this product are listed on or exempt from the Inventory.             |
| New Zealand Inventory of Chemicals:      | All components in this product are listed on or exempt from the Inventory.             |
| Japan ISHL Listing:                      | One or more components in this product are                                             |

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are  
not listed on or exempt from the Inventory.

|                                                                              |
|------------------------------------------------------------------------------|
| <b>16. Other information, including date of preparation or last revision</b> |
|------------------------------------------------------------------------------|

**Revision Date:** 11/14/2016

**Version #:** 4.0

**Further Information:** No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.