

#### **Section 1: IDENTIFICATION**

#### 1.1 PRODUCT IDENTIFIER

Product Name: Sakrete High Strength Concrete Mix

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Use: Various.

#### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: Sakrete of North America

625 Griffith Rd., Ste 100

Charlotte, NC

28217

Telephone Number: 866-725-7383

#### 1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone CHEMTREC 800-424-9300

Number: INTERNATIONAL + 01-703-527-3887

Date of Preparation: July 19, 2013 Rev February 24, 2016 Version #: 1.0

#### Section 2: HAZARD(S) IDENTIFICATION

## 2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012

Hazard class

Acute toxicity 4 (Oral) Skin irritation 2 Serious eye damage 1 Skin sensitization 1 Carcinogenicity 1A

Specific target organ toxicity - Repeated exposure 1

## 2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012

# **Hazard Pictogram:**







Signal Word: Danger

Hazard Statement: Harmful if swallowed. Causes skin irritation. Causes serious eye

damage. May cause an allergic skin reaction. May cause cancer. Causes damage to lungs through prolonged or repeated exposure.

**Prevention:** Do not eat, drink or smoke when using this product. Wash hands

thoroughly after handling. 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. Wear protective gloves/protective clothing/eye

protection/face protection. Use only outdoors or in a well-ventilated

Print date: 2016-02-24

area. Do not breathe dust.



**Response:** If swallowed: Immediately call a poison center/doctor. Rinse mouth.

If in eyes: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If

skin irritation or rash occurs: Get medical advice/attention. If

exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

**Disposal:** Dispose of contents and container in accordance with all local,

regional, national and international regulations.

#### 2.3 ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.

8 % of the mixture consists of ingredient(s) of unknown acute toxicity.

This product is a hazardous chemical as defined by NOM-018-STPS-2000.

#### **Mexico Classification:**



Blue = Health Red = Flammability Yellow = Reactivity White = Special

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

#### WHMIS Classification(s):

Class D2A - Carcinogenicity
Class D2A - Chronic Toxic Effects
Class E - Corrosive Material

#### **WHMIS Hazard Symbols:**





WHMIS Signal Word: DANGER



#### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 MIXTURES

| Ingredient                  | UN#            | H / F/ R / *   | CAS No     | Wt. %    |
|-----------------------------|----------------|----------------|------------|----------|
| Silica, crystalline, quartz | Not available. | 2/0/0          | 14808-60-7 | 60 - 100 |
| Portland cement             | Not available. | 2/0/0          | 65997-15-1 | 7 - 13   |
| Ashes (residues)            | Not available. | Not available. | 68131-74-8 | 1 - 5    |
| Ferric oxide                | Not available. | 1/0/0          | 1309-37-1  | 1 - 5    |
| Calcium carbonate           | Not available. | 1/0/0          | 1317-65-3  | 0.1 - 1  |

The exact percentage (concentration) of chemicals has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

#### **Section 4: FIRST- AID MEASURES**

#### 4.1 DESCRIPTION OF THE FIRST AID MEASURE

**Eye:** In case of contact, immediately flush eyes with plenty of water for at

least 15 minutes. If easy to do, remove contact lenses, if worn. Get

medical attention immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes. Wash clothing before

reuse. Call a physician if irritation develops and persists.

**Inhalation:** If breathing is difficult, remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical advice/attention if

you feel unwell.

**Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by

medical personnel. Never give anything by mouth to an unconscious

person. Get medical advice/attention.

# 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye: Causes serious eye damage. May cause burns in the presence of

moisture. Symptoms may include discomfort or pain, excess blinking

and tear production, with possible redness and swelling.

**Skin:** Causes skin irritation. May cause burns in the presence of moisture.

Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause

Print date: 2016-02-24

sensitization by skin contact.

**Inhalation:** May cause respiratory tract irritation.

**Ingestion:** Harmful if swallowed. May cause stomach distress, nausea or

vomiting.

## 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

**Note to Physicians:** Symptoms may not appear immediately.

Specific Treatments: In case of accident or if you feel unwell, seek medical advice

immediately (show the label or SDS where possible).

<sup>\*</sup> Per NOM-018-STPS-2000



#### **Section 5: FIRE-FIGHTING MEASURES**

#### **5.1 FLAMMABILITY**

Flammability: Not flammable by WHMIS/OSHA criteria.

5.2 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Treat for surrounding material.

Unsuitable Extinguishing Media: Not available.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

**Products of Combustion:** May include, and are not limited to: oxides of carbon.

**Explosion Data:** 

Sensitivity to Mechanical Impact: Not available. Sensitivity to Static Discharge: Not available.

#### 5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

# **Section 6: ACCIDENTAL RELEASE MEASURES**

## 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

#### 6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

**Methods for Containment:** Contain spill, then place in a suitable container. Do not flush to

sewer or allow to enter waterways. Use appropriate Personal

Protective Equipment (PPE).

**Methods for Cleaning-Up:** Vacuum or sweep material and place in a disposal container.

# **Section 7: HANDLING AND STORAGE**

#### 7.1 PRECAUTIONS FOR SAFE HANDLING

Handling: Avoid contact with skin and eyes. Do not swallow. Good

housekeeping is important to prevent accumulation of dust. Avoid generating and breathing dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking. (See section 8)

mands before eating, drinking, or smoking. (See section 6)

General Hygiene Advice: Launder contaminated clothing before reuse. Wash hands before

eating, drinking, or smoking.

#### 7.2 CONDITIONS FOR SAFE STORAGE. INCLUDING ANY INCOMPATIBILITIES

Storage: Keep out of the reach of children. Store in dust-tight, dry, labeled

containers. Keep containers closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage

Print date: 2016-02-24

area. Do not store in an area equipped with emergency water

sprinklers. (See section 10)



# Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **8.1 CONTROL PARAMETERS**

# **Exposure Guidelines**

| Occupational Exposure Limits |   |                           |  |
|------------------------------|---|---------------------------|--|
| Ingredient                   | OSHA-PEL  | ACGIH-TLV                 |  |
|                              | ((10 mg/m³)/(%SiO <sub>2</sub> +2) TWA (resp));<br>((30 mg/m³)/(%SiO <sub>2</sub> +2) TWA (total)); |                           |  |
| Silica, crystalline, quartz  | $((250)/(\%SiO_2+5) \text{ mppcf TWA (resp)})$  | 0.025 mg/m³               |  |
|                              |   | 1 mg/m³ (no asbestos and  |  |
|                              |   | <1% crystalline silica,   |  |
| Portland cement              | 15 mg/m³ (total); 5 mg/m³ (resp)  | respirable fraction)      |  |
| Ashes (residues)             | Not available.  | Not available.            |  |
|                              |   | 5 mg/m³ (iron oxide fume; |  |
| Ferric oxide                 | 10 mg/m <sup>3</sup>  | dust as Fe)               |  |
| Calcium carbonate            | 15 mg/m³ (total); 5 mg/m³ (resp)  | 10 mg/m³                  |  |

#### **8.2 EXPOSURE CONTROLS**

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust,

fume, vapor, etc.) below recommended exposure limits.

# 8.3 INDIVIDUAL PROTECTIVE MEASURES

**Personal Protective Equipment:** 

Eye/Face Protection: Wear approved eye (properly fitted dust- or splash-proof chemical safety

goggles) / face (face shield) protection.

Skin Protection:

**Hand Protection:** Wear suitable waterproof gloves.

**Body Protection:** Wear suitable waterproof protective clothing.

Respiratory Protection: A NIOSH approved dust mask or filtering facepiece is recommended in

poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following

requirements found in OSHA's respirator standard (29 CFR 1910.134)

and ANSI's standard for respiratory protection (Z88.2).

**General Health and Safety** 

Measures:

Handle according to established industrial hygiene and safety practices. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

Print date: 2016-02-24

#### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder.

Color: Various.

Odor: Characteristic.
Odor Threshold: Not available.

Physical State: Solid.



**pH:** 12 - 13

**Melting Point/Freezing Point:** Not available. **Initial Boiling Point and Boiling Range:** Not available. Flash Point: Not available. **Evaporation Rate:** Not available. Flammability: Not Flammable. **Lower Flammability/Explosive Limit:** Not available. **Upper Flammability/Explosive Limit:** Not available. **Vapor Pressure:** Not available. **Vapor Density:** Not available. Relative Density/Specific Gravity: Not available. Solubility: Not available. Partition coefficient: n-octanol/water: Not available. **Auto-ignition Temperature:** Not available. **Decomposition Temperature:** Not available. **Viscosity:** Not available. **Oxidizing Properties:** Not available.

## Section 10: STABILITY AND REACTIVITY

Not available.

## **10.1 REACTIVITY**

No dangerous reaction known under conditions of normal use.

## **10.2 CHEMICAL STABILITY**

**Explosive Properties:** 

Stable under normal storage conditions. Keep dry in storage.

## **10.3 POSSIBILITY OF HAZARDOUS REACTIONS**

No dangerous reaction known under conditions of normal use.

# **10.4 CONDITIONS TO AVOID**

Incompatible materials. Moisture.

#### 10.5 INCOMPATIBLE MATERIALS

Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.

# 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon.

#### Section 11: TOXICOLOGICAL INFORMATION

#### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

**Likely Routes of Exposure:** Skin contact, skin absorption, eye contact, inhalation, and ingestion.



# Symptoms related to physical/chemical/toxicological characteristics:

**Eye:** Causes serious eye damage. May cause burns in the presence of

moisture. Symptoms may include discomfort or pain, excess blinking and

tear production, with possible redness and swelling.

**Skin:** Causes skin irritation. May cause burns in the presence of moisture. Skin

contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitization by skin contact.

Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting.

**Inhalation:** May cause respiratory tract irritation.

## **Acute Toxicity:**

| Ingredient                  | IDLH           | LC50           | LD50                   |
|-----------------------------|----------------|----------------|------------------------|
| Silica, crystalline, quartz | Not available. | Not available. | Oral 500 mg/kg, rat    |
| Portland cement             | Not available. | Not available. | Not available.         |
| Ashes (residues)            | Not available. | Not available. | Oral >2000 mg/kg, rat  |
| Ferric oxide                | Not available. | Not available. | Oral >10000 mg/kg, rat |
| Calcium carbonate           | Not available. | Not available. | Oral 6450 mg/kg, rat   |

| Calculated overall Chemical Acute Toxicity Values |                |                |  |
|---|----------------|----------------|--|
| LC50 (inhalation) LD50 (oral) LD50 (dermal)       |                |                |  |
|   |                |                |  |
| Not available.                                    | 525 mg/kg, rat | Not available. |  |

| Ingredient                  | Chemical Listed as Carcinogen or<br>Potential Carcinogen<br>(NTP, IARC, OSHA, ACGIH, CP65)* |
|-----------------------------|---|
| Silica, crystalline, quartz | G-A2, I-1, N-1, O, CP65   |
| Portland cement             | G-A4  |
| Ashes (residues)            | Not listed.   |
| Ferric oxide                | G-A4, I-3   |
| Calcium carbonate           | Not listed.   |

# 11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

Skin Corrosion/Irritation: Causes skin irritation. May cause burns in the presence of

moisture.

Serious Eye Damage/Irritation: Causes serious eye damage. May cause burns in the presence of

moisture.

**Respiratory Sensitization:** Based on available data, the classification criteria are not met.

**Skin Sensitization:** May cause an allergic skin reaction.

STOT-Single Exposure: Based on available data, the classification criteria are not met.

Chronic Health Effects: Respirable crystalline silica in the form of quartz or cristobalite

from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a

Print date: 2016-02-24

factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the



severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.

Carcinogenicity: May cause cancer.

**Germ Cell Mutagenicity:** This product is not classified as a mutagen.

**Reproductive Toxicity:** 

**Developmental:** Based on available data, the classification criteria are not met.

**Teratogenicity:** Not hazardous by WHMIS criteria. **Embryotoxicity:** Not hazardous by WHMIS criteria.

**Fertility:** Based on available data, the classification criteria are not met.

STOT-Repeated Exposure: Causes damage to organs through prolonged or repeated

exposure.

**Aspiration Hazard:** Based on available data, the classification criteria are not met.

**Toxicologically Synergistic** 

Materials:Not available.Other Information:Not available.

#### **Section 12: ECOLOGICAL INFORMATION**

#### 12.1 ECOTOXICITY

**Acute/Chronic Toxicity:** No ecological consideration when used according to directions.

Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

Print date: 2016-02-24

#### 12.2 PERSISTENCE AND DEGRADABILITY

Not available.

#### 12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available.

**12.4 MOBILITY IN SOIL** 

Not available.

## 12.5 OTHER ADVERSE EFFECTS

Not available.

# **Section 13: DISPOSAL CONSIDERATIONS**

#### 13.1 WASTE TREATMENT METHODS

**Disposal Method:** This material must be disposed of in accordance with all local,

state, provincial, and federal regulations.

Other disposal

recommendations: Not available.



# **Section 14: TRANSPORT INFORMATION**

**14.1 UN NUMBER** 

DOT TDG NOM-004-SCT2-1994

Not regulated. Not regulated. Not regulated.

**14.2 UN PROPER SHIPPING NAME** 

DOT TDG NOM-004-SCT2-1994

Not applicable. Not applicable. Not applicable.

14.3 TRANSPORT HAZARD CLASS (ES)

DOT TDG NOM-004-SCT2-1994

Not applicable. Not applicable. Not applicable.

**14.4 PACKING GROUP** 

DOT TDG NOM-004-SCT2-1994

Not applicable. Not applicable. Not applicable.

# 14.5 ENVIRONMENTAL HAZARDS

Not available.

# 14.6 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available.

#### 14.7 SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood.

## **Section 15: REGULATORY INFORMATION**

# 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

**Canada:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**US:** MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Mexico: MSDS prepared pursuant to NOM-018-STPS-2000.

| SARA Title III              |                                 |                              |                     |             |
|-----------------------------|---------------------------------|------------------------------|---------------------|-------------|
| Ingredient                  | Section 302 (EHS)<br>TPQ (lbs.) | Section 304<br>EHS RQ (lbs.) | CERCLA<br>RQ (lbs.) | Section 313 |
| Silica, crystalline, quartz | Not listed.                     | Not listed.                  | Not listed.         | Not listed. |
| Portland cement             | Not listed.                     | Not listed.                  | Not listed.         | Not listed. |
| Ashes (residues)            | Not listed.                     | Not listed.                  | Not listed.         | Not listed. |
| Ferric oxide                | Not listed.                     | Not listed.                  | Not listed.         | Not listed. |
| Calcium carbonate           | Not listed.                     | Not listed.                  | Not listed.         | Not listed. |



#### **State Regulations**

## **California Proposition 65:**

This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

#### **Global Inventories:**

| Ingredient                  | Canada<br>DSL/NDSL | USA<br>TSCA |
|-----------------------------|--------------------|-------------|
| Silica, crystalline, quartz | DSL                | Yes.        |
| Portland cement             | DSL                | Yes.        |
| Ashes (residues)            | DSL                | Yes.        |
| Ferric oxide                | DSL                | Yes.        |
| Calcium carbonate           | NDSL               | Yes.        |

| NFPA-National Fire Protection Association: |   |  |  |
|--|---|--|--|
| Health: 3                                  |   |  |  |
| Fire:                                      | 1 |  |  |
| Reactivity:                                | 0 |  |  |

| HMIS-Hazardous Materials Identification System: |   |  |
|---|---|--|
| Health: 3*                                      |   |  |
| Fire:   | 1 |  |
| Physical Hazard: 0                              |   |  |

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

# SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

- A1 Confirmed human carcinogen.
- A2 Suspected human carcinogen.
- A3 Animal carcinogen.
- A4 Not classifiable as a human carcinogen.
- A5 Not suspected as a human carcinogen.

#### IARC (I) International Agency for Research on Cancer.

- 1 The agent (mixture) is carcinogenic to humans.
- 2A The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

# NTP (N) National Toxicology Program.

- 1 Known to be carcinogens.
- 2 Reasonably anticipated to be carcinogens.



# **Section 16: OTHER INFORMATION**

**Date of Preparation:** July 19, 2013

**Expiry Date:** February 24, 2019

Version: 1.0

**Revision Date:** February 24, 2016

**Disclaimer:** We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Prepared by: Nexreg Compliance Inc.

Phone: (519) 488-5126

www.nexreg.com

Prepared for: Sakrete of North America

**End of Safety Data Sheet**