

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Issue date: 3/18/2022 Revision date: 3/18/2022 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form Product name	: Mixture : Crack Resistant Concrete Mix
1.2. Recommended use and restrictions	s on use
Recommended use	: Various
1.3. Supplier	
Manufacturer Sakrete of North America 625 Griffith Rd., Ste 100 Charlotte, NC 28217 T 866-725-7383	
1.4. Emergency telephone number	
Emergency number	: CHEMTREC (800) 424-9300
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or n	nixture
GHS US classification	
Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1B Carc. 1A STOT RE 1	Causes skin irritation Causes serious eye damage May cause an allergic skin reaction May cause cancer Causes damage to organs (lungs) through prolonged or repeated exposure.
2.2. GHS Label elements, including pre-	cautionary statements
GHS US labeling	
Hazard pictograms (GHS US)	
Signal word (GHS US) Hazard statements (GHS US)	 Danger Causes skin irritation May cause an allergic skin reaction Causes serious eye damage May cause cancer Causes damage to organs (lungs) through prolonged or repeated exposure.
Precautionary statements (GHS US)	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention.

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

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 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 or doctor. Get medical advice/attention if you feel unwell. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures **Product identifier** % Name CAS-No.: 14808-60-7 80 - 100 Quartz CAS-No.: 65997-15-1 Cement, portland, chemicals 5 - 30Iron oxide (Fe2O3) CAS-No.: 1309-37-1 1 – 5 Sulfuric acid, calcium salt (1:1) CAS-No.: 7778-18-9 1 – 5 Calcium oxide CAS-No.: 1305-78-8 0.1 – 1 CAS-No.: 1317-65-3 Limestone 0.1 - 1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures		
4.1. Description of first aid measures		
First-aid measures after 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.	
First-aid measures after skin contact	: 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.	
First-aid measures after eye contact	: 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 or doctor/physician.	
First-aid measures after ingestion	: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.	
4.2. Most important symptoms and effects (acute and delayed)		
Symptoms/effects after inhalation	: Dust may cause respiratory tract irritation. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.	

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction. 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.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: May cause cancer through inhalation of dust. Causes damage to organs (lungs) through prolonged or repeated exposure

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures				
5.1. Suitable (and unsuitable) extinguishin	ng media			
Suitable extinguishing media Unsuitable extinguishing media	Use extinguishing media appropriate for surrounding fire.Do not use water jet.			
5.2. Specific hazards arising from the chemical				
Fire hazard	: Products of combustion may include, and are not limited to: oxides of carbon. irritating vapors. Oxides of sulfur. Metal oxides.			
5.3. Special protective equipment and precautions for fire-fighters				
Protection during firefighting	: 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			
General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.		
6.1.1. For non-emergency personnel			
No additional information available			
6.1.2. For emergency responders			
No additional information available			
6.2. Environmental precautions			
Prevent entry to sewers and public waters.			
6.3. Methods and material for containment and cleaning up			
For containment	: Contain spill, then place in a suitable container. Minimize dust generation. 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. Provide ventilation.		

For further information refer to section 8: "Exposure controls/personal protection".

6.4. Reference to other sections

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, gas, mist, spray, vapors. Do not swallow. Avoid contact with skin and eyes. Handle and open container with care. When using do not eat, drink or smoke. Avoid generating dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Good housekeeping is important to prevent accumulation of dust. Use only outdoors or in a well-ventilated area. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.
7.2. Conditions for safe storage, including a	ny incompatibilities
Storage conditions	: Keep out of the reach of children. Store locked up. Keep away from food, drink and animal feedingstuffs. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers. Keep container tightly closed when not in use. Store in a cool, well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Crack Resistant Concrete Mix		
No additional information available		
Cement, portland, chemicals (65997-15-1)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Portland cement	
ACGIH OEL TWA	1 mg/m³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)	
Remark (ACGIH)	TLV® Basis: Pulm func; resp symptoms; asthma. Notations: A4 (Not classifiable as a Human Carcinogen)	
ACGIH chemical category	Not Classifiable as a Human Carcinogen	
Regulatory reference	ACGIH 2020	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)	
Calcium oxide (1305-78-8)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Calcium oxide	
ACGIH OEL TWA	2 mg/m ³	
Remark (ACGIH)	TLV® Basis: URT irr	
Regulatory reference	ACGIH 2020	
USA - OSHA - Occupational Exposure Limits		
Local name	Calcium oxide	

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Calcium oxide (1305-78-8)			
OSHA PEL (TWA) [1]	5 mg/m ³		
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1		
Sulfuric acid, calcium salt (1:1) (7778-18-9)			
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³ (inhalable particulate matter)			
USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1]	15 mg/m³ (total dust)		
	5 mg/m ³ (respirable fraction)		
Iron oxide (Fe2O3) (1309-37-1)			
USA - ACGIH - Occupational Exposure Limits	-		
ACGIH OEL TWA	5 mg/m³ (respirable particulate matter)		
ACGIH chemical category	Not Classifiable as a Human Carcinogen		
USA - OSHA - Occupational Exposure Limits			
Local name	Iron oxide fume		
OSHA PEL (TWA) [1]	10 mg/m³ (fume) 15 mg/m³ (total dust (Rouge) 5 mg/m³ (respirable fraction (Rouge)		
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1		
Quartz (14808-60-7)			
USA - ACGIH - Occupational Exposure Limits			
ACGIH OEL TWA	0.025 mg/m³ (respirable particulate matter)		
ACGIH chemical category	Suspected Human Carcinogen		
USA - OSHA - Occupational Exposure Limits			
Local name	Quartz (Total Dust) (Silica: Crystalline)		
OSHA PEL (TWA) [1]	50 μg/m³ (Respirable crystalline silica)		
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.		
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts		
Limestone (1317-65-3)	Limestone (1317-65-3)		
USA - OSHA - Occupational Exposure Limits	USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)		
8.2. Appropriate engineering controls			
Appropriate engineering controls	Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.		
Environmental exposure controls :	Avoid release to the environment.		

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable waterproof gloves

Eye protection:

Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

Skin and body protection:

Wear suitable 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).

Other information:

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	•	Powder.
Color	÷	Gray
Odor	÷	No data available
Odor threshold	•	No data available
рН	:	12 – 13
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	Not flammable
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

VOC content

: 0 % Not applicable; 0 wt, Not applicable.

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological eff	ects
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified : Not classified
Calcium oxide (1305-78-8)	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: other:US Federal Register 38: 187, Part 1500, Section 41, 1973.
LC50 inhalation rat	> 6.04 mg/l/4h
Sulfuric acid, calcium salt (1:1) (7778	3-18-9)
LD50 oral rat	> 3000 mg/kg
LC50 inhalation rat	> 3.26 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Iron oxide (Fe2O3) (1309-37-1)	
LD50 oral rat	> 10000 mg/kg
Skin corrosion/irritation	: Causes skin irritation. pH: 12 – 13
Serious eye damage/irritation	: Causes serious eye damage. pH: 12 – 13
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Sulfuric acid, calcium salt (1:1) (7778-18-9)	
NOAEL (chronic,oral,animal/male,2 years)	256 mg/kg body weight Animal: rat, Animal sex: male, Guideline: other:No data, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	284 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:No data, Remarks or results: other:Effect type: carcinogenicity (migrated information)
Iron oxide (Fe2O3) (1309-37-1)	
IARC group	3 - Not classifiable
Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
Cement, portland, chemicals (65997-15-1)	
STOT-single exposure	May cause respiratory irritation.
Calcium oxide (1305-78-8)	
STOT-single exposure	May cause respiratory irritation.
	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 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.
Calcium oxide (1305-78-8)	
LOAEL (oral,rat,90 days)	300 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation,rat,dust/mist/fume,90 days)	0.413 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
Sulfuric acid, calcium salt (1:1) (7778-18-9)	
LOAEL (oral,rat,90 days)	237 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (oral,rat,90 days)	79 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Iron oxide (Fe2O3) (1309-37-1)	
LOAEC (inhalation,rat,dust/mist/fume,90 days)	0.2102 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
NOAEC (inhalation,rat,dust/mist/fume,90 days)	≥ 0.03 mg/l air Animal: rat, Animal sex: male

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Quartz (14808-60-7)		
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure	
Limestone (1317-65-3)		
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure	
Aspiration hazard Viscosity, kinematic	: Not classified : No data available	
Symptoms/effects after inhalation	 Dust may cause respiratory tract irritation. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. 	
Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction. 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.	
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.	
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
Chronic symptoms	: May cause cancer through inhalation of dust. Causes damage to organs (lungs) through prolonged or repeated exposure	
Other information	Likely routes of exposure: ingestion, inhalation, skin and eye.	

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.	
Calcium oxide (1305-78-8)	
LC50 - Fish [1]	1070 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])
EC50 - Crustacea [1]	49.1 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	32 mg/l Test organisms (species): Crangon septemspinosa Duration: '14 d'
NOEC chronic fish	100 mg/l Test organisms (species): other:Tilapia nilotica Duration: '46 d'
Sulfuric acid, calcium salt (1:1) (7778-18-9)	
LC50 - Fish [1]	2980 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 - Fish [2]	> 1970 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Iron oxide (Fe2O3) (1309-37-1)	
LC50 - Fish [1]	100000 mg/l (Exposure time: 96 h - Species: Danio rerio [static])
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	> 100 mg/l Test organisms (species):
12.2. Persistence and degradability	
Crack Resistant Concrete Mix	

Persistence and degradability	Not established.

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

12.3. Bioaccumulative potential		
Crack Resistant Concrete Mix		
Bioaccumulative potential	Not established.	
Calcium oxide (1305-78-8)		
BCF - Fish [1]	(no bioaccumulation)	
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		
Other information :	No other effects known.	

SECTION 13: Disposal considerations		
13.1. Disposal methods		
Product/Packaging disposal recommendations	 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. The generation of waste should be avoided or minimized wherever possible. 	

SECTION 14: Transport information	
In accordance with DOT	
14.1. UN number	
Not regulated for transport	
14.2. UN proper shipping name	
Proper Shipping Name (DOT)	: Not applicable
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not applicable
14.4. Packing group	
Packing group (DOT)	: Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
Special transport precautions	: Do not handle until all safety precautions have been read and understood.
14.7. Transport in bulk according to Ann	nex II of MARPOL 73/78 and the IBC Code

Not applicable

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

15.3. US State regulations

🗥 WARNING:

This product can expose you to crystalline silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.		
Issue date	: 03/18/2022	
Revision date	: 03/18/2022	
Other information	: None.	
Prepared by	: Nexreg Compliance Inc.	
	www.Nexreg.com	

Full text of H-phrases		
Carc. 1A	Carcinogenicity Category 1A	
Eye Dam. 1	Serious eye damage/eye irritation Category 1	
Skin Irrit. 2	Skin corrosion/irritation Category 2	
Skin Sens. 1B	Skin sensitization, category 1B	
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1	

Safety Data Sheet (SDS), USA

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