

Safety Data Sheet According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 08/09/2018 Date of Issue: 09/11/2012

Version: 2.0

SECTION 1: IDENTIFICATION

1.1. **Product Identifier**

Product Form: Mixture Product Name: Slag Cement

Intended Use of the Product 1.2.

Use of the Substance/Mixture: No use is specified

Name, Address, and Telephone of the Responsible Party 1.3.

Company

Calportland Company 2025 E. Financial Way Glendora, CA 91741 - United States T 626-852-6200 www.calportland.com

Emergency Telephone Number 1.4.

: 626-852-6200

SECTION 2: HAZARDS IDENTIFICATION

| 2.1. | Classification of the | e Substance or Mixture |
|-----------|------------------------------|-------------------------------|
| Skin Irr | it. 2 | H315 |
| Eye Da | m. 1 | H318 |
| STOT S | E 3 | H335 |
| Aquati | c Acute 3 | H402 |
| Full text | of hazard classes and | H-statements : see section 16 |

2.2. **Label Elements**

Emergency Number

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Danger Hazard Statements (GHS-US) : H315 - Causes skin irritation.

Precautionary Statements (GHS-US)

- H318 Causes serious eye damage.
 - H335 May cause respiratory irritation.
- H402 Harmful to aquatic life.
- : P261 Avoid breathing dust.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P302+P352 - If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes.
- Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a poison center or doctor.
- P321 Specific treatment (see section 4 on this SDS).
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. **Other Hazards**

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

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2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product Identifier | % | GHS-US classification |
|------------------------|---------------------|---------|---|
| Calcium oxide | (CAS-No.) 1305-78-8 | 39 - 43 | Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 3, H402 |
| Silica, amorphous | (CAS-No.) 7631-86-9 | 31 - 35 | Not classified |
| Aluminum oxide (Al2O3) | (CAS-No.) 1344-28-1 | 13 - 15 | Not classified |
| Magnesium oxide (MgO) | (CAS-No.) 1309-48-4 | 6 - 8 | Not classified |

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Causes skin irritation. May cause respiratory irritation. Causes serious eye damage.

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. When this product is wet it is corrosive.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** May release corrosive vapors.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe dust. Do not get in eyes, on skin, or on clothing.

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6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive when wet.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Do not get in eyes, on skin, or on clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry place. Keep/Store away from incompatible materials. **Incompatible Materials:** Strong acids. Strong oxidizers.

7.3. Specific End Use(s)

No use is specified

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

| Calcium oxide (1305-78-8) | | | |
|-----------------------------------|--------------------------------------|---|--|
| USA ACGIH | ACGIH TWA (mg/m ³) | 2 mg/m ³ | |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 2 mg/m ³ | |
| USA IDLH | US IDLH (mg/m ³) | 25 mg/m ³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 5 mg/m ³ | |
| Silica, amorp | hous (7631-86-9) | | |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 6 mg/m ³ | |
| USA IDLH | US IDLH (mg/m ³) | 3000 mg/m ³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 6 mg/m ³ | |
| USA OSHA | OSHA PEL (TWA) (ppm) | 20 mppcf (80mg/m ³ /%SiO ₂) | |
| Aluminum ox | Aluminum oxide (Al2O3) (1344-28-1) | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 10 mg/m ³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 15 mg/m ³ (total dust) | |
| | | 5 mg/m ³ (respirable fraction) | |
| Magnesium oxide (MgO) (1309-48-4) | | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter) | |
| USA ACGIH | ACGIH chemical category | Not Classifiable as a Human Carcinogen | |
| USA IDLH | US IDLH (mg/m ³) | 750 mg/m³ (fume) | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 15 mg/m ³ (fume, total particulate) | |

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| 8.2. | Exposure Controls |
|------|-------------------|
|------|-------------------|

| Appropriate Engineering Controls | : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. |
|------------------------------------|--|
| Personal Protective Equipment | : Gloves. Protective clothing. Protective goggles. |
| Materials for Protective Clothing | : Chemically resistant materials and fabrics. |
| Hand Protection | : Wear protective gloves. |
| Eye and Face Protection | : Chemical safety goggles. |
| Skin and Body Protection | : Wear suitable protective clothing. |
| Respiratory Protection | If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection. |
| Other Information | When using, do not eat, drink or smoke. |
| SECTION 9: PHYSICAL AND CHEMIC | AL PROPERTIES |
| 9.1. Information on Basic Physical | and Chemical Properties |
| Physical State | : Solid |
| Appearance | : Granular powder |
| Odor | : None |
| Odor Threshold | : No data available |
| рН | : No data available |
| Evaporation Rate | : No data available |
| Melting Point | : No data available |
| Freezing Point | : No data available |
| Boiling Point | : No data available |
| Flash Point | |

No data availableNo data available

: No data available

: No data available

: No data available

: No data available

| Solubility | : Insoluble |
|--|---------------------|
| Partition Coefficient: N-Octanol/Water | : No data available |
| Viscosity | : No data available |
| 0.2 Other Information Ne additional in | formation available |

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight and incompatible materials.

10.5. Incompatible Materials: Strong acids. Strong oxidizers.

10.6. Hazardous Decomposition Products: None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Auto-ignition Temperature

Vapor Pressure

Relative Density

Decomposition Temperature Flammability (solid, gas)

Relative Vapor Density at 20°C

| Calcium oxide | (1305-78-8) |
|---------------|-------------|
|---------------|-------------|

| LD50 Oral Rat | > 2000 mg/kg |
|--------------------|--------------|
| LD50 Dermal Rabbit | > 2500 mg/kg |
| | |

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| Silica, amorphous (7631-86-9) | | |
|------------------------------------|--|--|
| LD50 Oral Rat | 7900 mg/kg | |
| LD50 Dermal Rabbit | > 2000 mg/kg | |
| Aluminum oxide (Al2O3) (1344-28-1) | | |
| LD50 Oral Rat | > 15900 mg/kg | |
| LC50 Inhalation Rat | > 2.3 mg/l/4h No deaths were reported. | |
| Magnesium oxide (MgO) (1309-48-4) | | |
| LD50 Oral Rat | 3870 mg/kg | |

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Silica, amorphous (7631-86-9)

IARC group

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes.

3

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. When this product is wet it is corrosive.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

| Ecology - General | : Harmful to aquatic life. |
|---|---|
| Calcium oxide (1305-78-8) | |
| LC50 Fish 1 | 50.6 mg/l |
| Silica, amorphous (7631-86-9) | |
| LC50 Fish 1 | 5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static]) |
| EC50 Daphnia 17600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia) | |
| Aluminum oxide (Al2O3) (1344-28-1) | |
| LC50 Fish 1 | > 100 mg/l |
| EC50 Daphnia 1 | > 100 mg/l |
| ErC50 (Algae) | > 100 mg/l |
| NOEC (Acute) | > 50 mg/l |
| 12.2. Persistence and Degradability | |

Slag Cement

| Side centent | | |
|---------------------------------|------------------|--|
| Persistence and Degradability | Not established. | |
| 12.3. Bioaccumulative Potential | | |

| Slag Cement | |
|--|------------------|
| Bioaccumulative Potential | Not established. |
| Calcium oxide (1305-78-8) | |
| BCF Fish 1 (no bioaccumulation) | |
| Silica, amorphous (7631-86-9) | |
| BCF Fish 1 (no bioaccumulation expected) | |

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information

: Avoid release to the environment.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

| Proper Shipping Name | : CALCIUM OXIDE |
|----------------------------|-----------------|
| Hazard Class | : 8 |
| Identification Number | : UN1910 |
| Label Codes | : 8 |
| Packing Group | : 111 |
| ERG Number | : 157 |
| 14.2. In Accordance with I | MDG |
| Proper Shipping Name | : CALCIUM OXIDE |
| Hazard Class | : 8 |
| Identification Number | : UN1910 |
| Label Codes | : 8 |



14.3. In Accordance with IATA

| Proper Shipping Name | : CALCIUM OXIDE |
|-----------------------|-----------------|
| Packing Group | : 111 |
| Identification Number | : UN1910 |
| Hazard Class | : 8 |
| Label Codes | : 8 |
| ERG Code (IATA) | : 8L |

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

| Slag Cement | | |
|---|---------------------------------|--|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard | |
| Calcium oxide (1305-78-8) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| Silica, amorphous (7631-86-9) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| Aluminum oxide (Al2O3) (1344-28-1) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| Subject to reporting requirements of United States SARA Section 313 | | |
| SARA Section 313 - Emission Reporting | 1 % (fibrous forms) | |
| Magnesium oxide (MgO) (1309-48-4) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |

15.2. US State Regulations

WARNING: This product can expose you to chemicals, including Silica, crystalline (airborne particles of respirable size), which is known to the State of California to cause cancer; and chromium (hexavalent compounds), which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Calcium oxide (1305-78-8)

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- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Silica, amorphous (7631-86-9)

U.S. - Massachusetts - Right To Know List

U.S. - Pennsylvania - RTK (Right to Know) List

Aluminum oxide (Al2O3) (1344-28-1) U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

Magnesium oxide (MgO) (1309-48-4)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

| Date of Preparation or Latest Revision | n |
|--|---|
| Other Information | |

: 08/09/2018

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

| Aquatic Acute 3 | Hazardous to the aquatic environment - Acute Hazard Category 3 |
|-----------------|--|
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H335 | May cause respiratory irritation |
| H402 | Harmful to aquatic life |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)