

# \* \* \* Section 1 - Product and Company Identification \* \* \*

**Material Name: Slag Cement** 

#### **Manufacturer Information**

CALPORTLAND COMPANY 2025 E. Financial Way Glendora, CA 91741 Phone: 626-852-6200 www.calportland.com

# \* \* \* Section 2 - Hazards Identification \* \* \*

#### **GHS Classification:**

Skin Corrosion/Irritation - Category 2
Eye Damage/Irritation - Category 2B
Carcinogenicity - Category 2
Specific Target Organ Toxicity Single Exposure - Category 3

# **GHS LABEL ELEMENTS**

Symbol(s)



### Signal Word

Warning

#### **Hazard Statements**

Causes skin irritation.

Causes eye irritation.

Suspected of causing cancer.

May cause respiratory irritation.

### **Precautionary Statements**

#### Prevention

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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.

Avoid breathing dust.

Use only outdoors or in a well-ventilated area.

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#### Response

If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

#### Storage

Store in an appropriate container or containment structure.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

# \* \* \* Section 3 - Composition / Information on Ingredients \* \* \*

CAS#	Component	Percent
1305-78-8	Calcium oxide	39-43
7631-86-9	Silica, amorphous	31-35
1344-28-1	Aluminum oxide	13-15
1309-48-4	Magnesium oxide	6-8

# \* \* \* Section 4 - First Aid Measures \* \* \*

## First Aid: Eyes

Immediately flush eyes thoroughly with water for at least 15 minutes. Call physician if irritation persists.

#### First Aid: Skin

Wash skin with soap and water. Call physician if irritation persists.

### First Aid: Ingestion

Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician for medical advice.

#### First Aid: Inhalation

Remove to fresh air. Shortness of breath, coughing, reduced pulmonary function are signs of overexposure. Seek medical help if coughing and other symptoms do not subside.

# \* \* \* Section 5 - Fire Fighting Measures \* \* \*

#### **General Fire Hazards**

See Section 9 for Flammability Properties.

None

#### **Hazardous Combustion Products**

None

#### **Extinguishing Media**

Use appropriate extinguishing media for surrounding fire.

## **Unsuitable Extinguishing Media**

None

#### Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

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# \* \* \* Section 6 - Accidental Release Measures \* \* \*

## **Recovery and Neutralization**

Avoid actions that cause dust to become airborne. Avoid inhalation of dust and contact with skin. Wear appropriate personal protective equipment as described in Section 8.

# **Materials and Methods for Clean-Up**

Vacuum cleaning is the preferred method for the dry fine materials. Avoid dry sweeping which creates dust. Apply water spray to prevent airborne dust. Scrape up wet material and place in an appropriate container.

# **Emergency Measures**

Isolate area. Keep unnecessary personnel away.

# **Personal Precautions and Protective Equipment**

Wear appropriate protective equipment and clothing during clean-up.

#### **Environmental Precautions**

None

# **Prevention of Secondary Hazards**

None

# \* \* \* Section 7 - Handling and Storage \* \* \*

### **Handling Procedures**

Do not breathe dust which may be created during handling. Use good housekeeping procedures. Do not rely on vision to determine whether respirable silica is present in the air, as it may be present without a visible cloud. Wash thoroughly after exposure to dust. Promptly remove dusty clothing and launder before reuse.

## **Storage Procedures**

Normal temperatures and pressures do not affect the material.

#### Incompatibilities

Halogens, acids, combustible materials, metals salts, oxidizing agents.

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# \* \* \* Section 8 - Exposure Controls / Personal Protection \* \* \*

# **Component Exposure Limits**

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

ACGIH: 2 mg/m3 TWA OSHA (Final): 5 mg/m3 TWA

OSHA 5 mg/m3 TWA (not in effect as a result of reconsideration)

(Vacated):

NIOSH: 2 mg/m3 TWA
Alberta: 2 mg/m3 TWA
British 2 mg/m3 TWA

Columbia:

Manitoba: 2 mg/m3 TWA New 2 mg/m3 TWA

Brunswick:

NW Territories: 2 mg/m3 TWA

4 mg/m3 STEL

Nova Scotia: 2 mg/m3 TWA Nunavut: 2 mg/m3 TWA

4 mg/m3 STEL

Ontario: 2 mg/m3 TWA
Quebec: 2 mg/m3 TWAEV
Saskatchewan: 2 mg/m3 TWA

4 mg/m3 STEL

Yukon: 2 mg/m3 TWA

4 mg/m3 STEL

### Silica, amorphous (7631-86-9)

OSHA 6 mg/m3 TWA (<1% Crystalline silica)

(Vacated):

NIOSH: 6 mg/m3 TWA

NW Territories: 2 mg/m3 TWA (respirable mass); 5 mg/m3 TWA (total mass); 0.05 mg/m3 TWA (regulated under

Silica flour, respirable mass); 0.15 mg/m3 TWA (total mass, regulated under Silica flour)

Nunavut: 2 mg/m3 TWA (respirable mass); 5 mg/m3 TWA (total mass); 0.05 mg/m3 TWA (regulated under

Silica flour, respirable mass); 0.15 mg/m3 TWA (regulated under Silica flour, total mass)

kon: 300 particle/mL TWA (as measured by Konimeter instrumentation, listed under Silica); 20 mppcf

TWA (as measured by Impinger instrumentation, listed under Silica); 2 mg/m3 TWA (respirable

mass, listed under Silica)

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#### **Aluminum oxide (1344-28-1)**

OSHA (Final): 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
OSHA 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

(Vacated):

Alberta: 10 mg/m3 TWA

New 10 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica)

Brunswick:

NW Territories: 10 mg/m3 TWA; 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass)

20 mg/m3 STEL

Nunavut: 10 mg/m3 TWA; 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass)

20 mg/m3 STEL

Quebec: 10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust, as Al)

Saskatchewan: 10 mg/m3 TWA

20 mg/m3 STEL

Yukon: 30 mppcf TWA (Al2O3); 10 mg/m3 TWA (Al2O3)

20 mg/m3 STEL (Al2O3)

#### Magnesium oxide fume (1309-48-4)

ACGIH: 10 mg/m3 TWA (inhalable fraction)
OSHA (Final): 15 mg/m3 TWA (fume, total particulate)

OSHA 10 mg/m3 TWA (total particulate)

(Vacated):

Alberta: 10 mg/m3 TWA (fume)

British 10 mg/m3 TWA (fume, inhalable); 3 mg/m3 TWA (respirable dust and fume, as Mg)

Columbia: 10 mg/m3 STEL (respirable dust and fume, as Mg)

Manitoba: 10 mg/m3 TWA (inhalable fraction)

New 10 mg/m3 TWA (fume)

Brunswick:

NW Territories: 10 mg/m3 TWA (fume, as Mg)

20 mg/m3 STEL (fume, as Mg)

Nova Scotia: 10 mg/m3 TWA (inhalable fraction) Nunavut: 10 mg/m3 TWA (fume, as Mg)

20 mg/m3 STEL (fume, as Mg)

Ontario: 10 mg/m3 TWA (inhalable)

Quebec: 10 mg/m3 TWAEV (fume, as Mg)

Saskatchewan: 10 mg/m3 TWA (inhalable fraction)

20 mg/m3 STEL (inhalable fraction)

Yukon: 10 mg/m3 TWA (fume, as Mg) 10 mg/m3 STEL (fume, as Mg)

# **Engineering Measures**

Use local exhaust or general dilution ventilation to control exposure within applicable limits.

# **Personal Protective Equipment: Respiratory**

Avoid actions that cause dust exposure to occur. Use local or general ventilation to control exposures below applicable exposure limits. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

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## **Personal Protective Equipment: Hands**

Where prolonged exposure to products might occur, wear impervious gloves to eliminate skin contact.

## Personal Protective Equipment: Eyes

When engaged in activities where ingredients could contact the eye, wear safety glasses with side shields or goggles. In extremely dusty environments and unpredictable environments, wear unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with ingredients.

## Personal Protective Equipment: Skin and Body

Normal work clothing (long sleeved shirts and long pants) is recommended.

# \* \* \* Section 9 - Physical & Chemical Properties \* \* \*

Appearance: Granular mixture Odor: No Distinct Odor

Physical State: Powder pH: Not Applicable
Vapor Pressure: Not Applicable
Boiling Point: Not Applicable
Solubility (H2O): Insoluble
Not Applicable
Specific Gravity: Not Applicable
Specific Gravity: Not Applicable
Not Applicable
Not Applicable
Not Applicable

**Evaporation Rate:** Not Applicable **VOC:** Not Applicable

Octanol/H2O Coeff.: Not Applicable Flash Point: None Flash Point Method: Not Applicable Upper Flammability Limit None

(UFL):

Lower Flammability Limit None Burning Rate: None

(LFL):

Auto Ignition: None

# \* \* \* Section 10 - Chemical Stability & Reactivity Information \* \* \*

#### **Chemical Stability**

This is a stable material.

### **Hazardous Reaction Potential**

Will not occur.

#### Conditions to Avoid

Avoid dust generation.

#### **Incompatible Products**

Halogens, acids, combustible materials, metals salts, oxidizing agents.

#### **Hazardous Decomposition Products**

May form crystalline silica.

# \* Section 11 - Toxicological Information \* \* \*

# **Acute Toxicity**

#### Component Analysis - LD50/LC50

Calcium oxide (1305-78-8)

Oral LD50 Rat 500 mg/kg

#### Silica, amorphous (7631-86-9)

Oral LD50 Rat >5000 mg/kg; Inhalation LC50 Rat >2.2 mg/L 1 h; Dermal LD50 Rabbit >2000 mg/kg

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**Aluminum oxide (1344-28-1)** 

Oral LD50 Rat >5000 mg/kg

## Potential Health Effects: Skin Corrosion Property/Stimulativeness

This product can cause abrasion and irritation to the skin.

## Potential Health Effects: Eye Critical Damage/ Stimulativeness

Exposure to airborne dust during the handling of this product may cause immediate or delayed irritation and/or abrasion to the cornea.

### Potential Health Effects: Ingestion

No known health effect if ingested.

#### **Potential Health Effects: Inhalation**

May cause respiratory irritation.

# Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any sensitization effects.

## **Generative Cell Mutagenicity**

This product is not reported to have any mutagenic effects.

## Carcinogenicity

#### A: General Product Information

Suspected of causing cancer.

#### **B: Component Carcinogenicity**

#### Silica, amorphous (7631-86-9)

IARC: Monograph 68 [1997]; Supplement 7 [1987] (Group 3 (not classifiable))

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

ACGIH: A4 - Not Classifiable as a Human Carcinogen

#### **Reproductive Toxicity**

This product is not reported to have any reproductive toxicity effects.

# **Specified Target Organ General Toxicity: Single Exposure**

This product is not reported to have any single exposure specific target organ toxicity effects.

# **Specified Target Organ General Toxicity: Repeated Exposure**

May cause respiratory irritation.

### **Aspiration Respiratory Organs Hazard**

This product is not reported to have any aspiration hazard effects.

# \* \* \* Section 12 - Ecological Information \* \* \*

#### **Ecotoxicity**

#### A: General Product Information

This product is not reported to have any ecotoxcity effects.

### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Calcium oxide (1305-78-8)

Test & Species Conditions

96 Hr LC50 Cyprinus carpio 1070 mg/L [static]

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Silica, amorphous (7631-86-9)

Test & Species Conditions

96 Hr LC50 Brachydanio rerio 5000 mg/L [static] 72 Hr EC50 Pseudokirchneriella 440 mg/L

subcapitata

48 Hr EC50 Ceriodaphnia dubia 7600 mg/L

# Persistence/Degradability

No information available for the product.

#### **Bioaccumulation**

No information available for the product.

## **Mobility in Soil**

No information available for the product.

\* \* \* Section 13 - Disposal Considerations \* \* \*

## Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

# **Disposal of Contaminated Containers or Packaging**

Dispose of contents/container in accordance with local/regional/national/international regulations.

\* \* \* Section 14 - Transportation Information \* \* \*

#### **DOT/TDG Information**

Shipping Name: Not Regulated

\* \* \* Section 15 - Regulatory Information \* \* \*

## **Regulatory Information**

#### **US Federal Regulations**

#### **Component Analysis**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

#### **Aluminum oxide (1344-28-1)**

SARA 313: 1.0 % de minimis concentration (fibrous forms)

#### **State Regulations**

#### **Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Calcium oxide	1305-78-8	Yes	Yes	Yes	Yes	Yes	No
Silica, amorphous	7631-86-9	Yes	Yes	Yes	Yes	Yes	No
Aluminum oxide	1344-28-1	Yes	Yes	Yes	Yes	Yes	No
Magnesium oxide	1309-48-4	Yes	Yes	Yes	Yes	Yes	No

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The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

#### **Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Calcium oxide	1305-78-8	1 %
Silica, amorphous	7631-86-9	1 %
Aluminum oxide	1344-28-1	1 %
Magnesium oxide	1309-48-4	1 %

### Status under Workplace Hazardous Materials Information System (WHMIS), Canada

This product is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and is therefore subject to the labeling and MSDS requirements of the Workplace Hazardous Materials Information System (WHMIS).

#### Status under Canadian Environmental Protection Act

Not Listed

#### **Additional Regulatory Information**

#### **Component Analysis - Inventory**

Component	CAS#	TSCA	CAN	EEC
Calcium oxide	1305-78-8	Yes	DSL	EINECS
Silica, amorphous	7631-86-9	Yes	DSL	EINECS
Aluminum oxide	1344-28-1	Yes	DSL	EINECS
Magnesium oxide	1309-48-4	Yes	DSL	EINECS

# \* \* \* Section 16 - Other Information \* \* \*

Hazardous Material Information System (HMIS):	Health	1
	Flammability	0
	Physical Hazard	0
	Personal Protection	В

**Material Name: Slag Cement** 

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves

# Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

#### **Literature References**

None

#### Other Information

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