According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

Calcium Hydroxide,

SECTION 1: Identification

Product identifier

Product name: Calcium Hydroxide, **Product code:** CH5010

Recommended use of the product and restriction on use Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

AquaPhoenix Scientific 860 Gitts Run Road Hanover PA 17331 (717) 632-1291

Emergency telephone number: United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Skin irritation, category 2 Serious eye damage, category 1 Specific target organ toxicity - single exposure, category 3, respiratory irritation

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H315 Causes skin irritation

H318 Causes serious eye damage

H335 May cause respiratory irritation

Precautionary statements:

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P271 Use only outdoors or in a well-ventilated area

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 If on skin: Wash with soap and water

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

Calcium Hydroxide,

P332+P313 If skin irritation occurs: Get medical advice/attention

P305+P351+P338+P310 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. P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell P405 Store locked up P403+P233 Store in a well ventilated place. Keep container tightly closed P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

| Identification | Name | Weight % |
|--------------------------|-------------------|----------|
| CAS number: 1305-62-0 | Calcium Hydroxide | 100 |

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Move exposed individual to fresh air Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Wash affected area with soap and water Seek medical attention if symptoms develop or persist

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Immediately call a POISON CONTROL CENTER or seek medical attention

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

Calcium Hydroxide,

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|-----------------------|-------------------|------------|--|
| ACGIH | Calcium Hydroxide | 1305-62-0 | ACGIH TLV TWA 5 mg/m ³ |
| NIOSH | Calcium Hydroxide | 1305-62-0 | NIOSH REL TWA 5.0 mg/m ³ |
| United States (OSHA) | Calcium Hydroxide | 1305-62-0 | OSHA PEL TWA 15 mg/m ³ (total dust) |

Occupational Exposure limit values:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

Calcium Hydroxide,

| Country (Legal Basis) | Substance | Identifier | Permissible concentration | |
|-----------------------|-------------------|------------|----------------------------------|--|
| | Calcium Hydroxide | 1305-62-0 | OSHA PEL TWA 5 mg/m ³ | |

| Bio | logical | limit | values: |
|-----|---------|-------|---------|
| | | | |

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | 1 |
|---|----------------------------|
| Appearance | Off-white solid |
| Odor | Odorless |
| Odor threshold | Not determined |
| рН | 12.4 saturated solution |
| Melting point/freezing point | 580°C |
| Initial boiling point/range | 2850°C |
| Flash point (closed cup) | Not determined |
| Evaporation rate | Not determined |
| Flammability (solid, gas) | Not determined |
| Upper flammability/explosive limit | Not determined |
| Lower flammability/explosive limit | Not determined |
| Vapor pressure | Not determined |
| Vapor density | Not determined |
| Density | Not determined |
| Relative density | 2.24 |
| Solubilities | Slightly soluble in water. |
| Partition coefficient (n-octanol/water) | Not determined |
| Auto/Self-ignition temperature | Not determined |
| Decomposition temperature | Not determined |
| Dynamic viscosity | Not determined |
| Kinematic viscosity | Not determined |
| | |

Page 4 of 8

(respirable fraction)

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

| Calcium Hydroxide, | | |
|----------------------|----------------|--|
| Explosive properties | Not determined | |
| Oxidizing properties | Not determined | |

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Store away from oxidizing agents, strong acids or bases. Incompatible Materials. Dust generation. excess heat.

Incompatible materials:

Metals, acids, bases, strong oxidizing and reducing agents.

Hazardous decomposition products:

Carbon oxides (CO, CO2). Oxides of calcium.

SECTION 11: Toxicological information

Acute toxicity

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

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data: No data available.

Substance data:

| Name | Result |
|-------------------|-------------------------|
| Calcium Hydroxide | Causes skin irritation. |

Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data:

| Name | Result |
|-------------------|------------------------|
| Calcium Hydroxide | Causes eye irritation. |

Respiratory or skin sensitization

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

Product data: No data available.

Substance data:

| Name | Result |
|-------------------|--|
| Calcium Hydroxide | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |

Carcinogenicity

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

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

Calcium Hydroxide,

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

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

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

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

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: May cause respiratory irritation

Product data: No data available.

Substance data:

| Name | Result |
|-------------------|--|
| Calcium Hydroxide | Inhalation - May cause respiratory irritation. |

Specific target organ toxicity (repeated exposure)

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

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

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

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available. Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

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

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available. **Substance data:** No data available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

Calcium Hydroxide,

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

| UN number | UN3262 |
|-------------------------------|---|
| UN proper shipping name | Corrosive solid, basic, inorganic, n.o.s. |
| UN transport hazard class(es) | 8 |
| Packing group | III |
| Environmental hazards | None |
| Special precautions for user | None |

International Maritime Dangerous Goods (IMDG)

| UN number | UN3262 |
|-------------------------------|---|
| UN proper shipping name | Corrosive solid, basic, inorganic, n.o.s. |
| UN transport hazard class(es) | 8 |
| Packing group | III |
| Environmental hazards | None |
| Special precautions for user | None |

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

| UN number | UN3262 Corrosive solid, basic, inorganic, n.o.s. | | |
|-------------------------------|---|-----------|--|
| UN proper shipping name | | | |
| UN transport hazard class(es) | 8 | CORROSIVE | |
| Packing group | III | | |
| Environmental hazards | None | | |
| Special precautions for user | None | | |

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

1305-62-0 Calcium Hydroxide

Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.05.2017

Calcium Hydroxide,

| Acute | Chronic | Fire | Pressure | Reactive |
|-------|---------|------|----------|----------|
| No | No | No | No | No |

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals: None of the ingredients are listed.

CERCLA: None of the ingredients are listed.

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

| Più | Massachasetts hight to known | | | | | |
|-----------------------------|--|-------------------|--------|--|--|--|
| | 1305-62-0 | Calcium Hydroxide | Listed | | | |
| New Jersey Right to Know: | | | | | | |
| | 1305-62-0 | Calcium Hydroxide | Listed | | | |
| New York Right to Know: | | | | | | |
| | 1305-62-0 | Calcium Hydroxide | Listed | | | |
| Pennsylvania Right to Know: | | | | | | |
| | 1305-62-0 | Calcium Hydroxide | Listed | | | |
| Cal | California Proposition 65: None of the ingredients are listed. | | | | | |
| | | | | | | |

SECTION 16: Other information

Abbreviations and Acronyms: None Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 3-0-0

HMIS: 3-0-0 Initial preparation date: 12.05.2017

End of Safety Data Sheet