1. Identification

**HERCUL-EZ Product identifier**
None.

**Other means of identification**
See product data sheet

**Recommended use**
None known.

**Recommended restrictions**
None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**
CETCO, an MTI Company
2870 Forbes Avenue
Hoffman Estates, IL 60192
United States

**Telephone**
General Information 800 527-9948
Emergency 1.866.519.4752/1 760 476 3962

**Website**
http://www.cetco.com/
safetydata@mineraltech.com

**Emergency phone number**

**Americas**
1.866.519.4752 (US, Canada, Mexico) 1 760 476 3962

2. Hazard(s) identification

**Physical hazards**
Not classified.

**Health hazards**
Acute toxicity, inhalation Category 4
Serious eye damage/eye irritation Category 2

**Environmental hazards**
Not classified.

**OSHA defined hazards**
Not classified.

**Label elements**

**Signal word**
Warning

**Hazard statement**
Causes serious eye irritation. Harmful if inhaled.

**Precautionary statement**

**Prevention**
Avoid breathing dust. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection.

**Response**
If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.

**Storage**
Store away from incompatible materials.

**Disposal**
Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)**
None known.

**Supplemental information**
None.

3. Composition/information on ingredients

**Mixtures**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM HYDROXIDE</td>
<td></td>
<td>1305-62-0</td>
<td>10 - &lt; 20</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>80 - &lt; 90</td>
</tr>
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</table>
Impurities

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium oxide (CaO)</td>
<td></td>
<td>1305-78-8</td>
<td>0 - 0.1</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td></td>
<td>14808-60-7</td>
<td>0 - 0.1</td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments: Occupational Exposure Limits for impurities are listed in Section 8.

4. First-aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.

Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact: Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures


Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions: Move containers from fire area if you can do so without risk.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling: Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM HYDROXIDE (CAS 1305-62-0)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td>Impurities</td>
<td>Type</td>
<td>Value</td>
<td>Form</td>
</tr>
<tr>
<td>Calcium oxide (CaO) (CAS 1305-78-8)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Crystalline Silica (CAS 14808-60-7)</td>
<td>PEL</td>
<td>0.05 mg/m3</td>
<td>Respirable dust.</td>
</tr>
</tbody>
</table>

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

| Impurities                          | Type   | Value   | Form               |
| Crystalline Silica (CAS 14808-60-7) | TWA    | 0.1 mg/m3| Respirable.        |
|                                     |        | 2.4 mppcf| Respirable.        |

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM HYDROXIDE (CAS 1305-62-0)</td>
<td>TWA</td>
<td>5 mg/m3</td>
</tr>
<tr>
<td>Impurities</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>Calcium oxide (CaO) (CAS 1305-78-8)</td>
<td>TWA</td>
<td>2 mg/m3</td>
</tr>
<tr>
<td>Crystalline Silica (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m3</td>
</tr>
</tbody>
</table>

**US. NIOSH: Pocket Guide to Chemical Hazards**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM HYDROXIDE (CAS 1305-62-0)</td>
<td>TWA</td>
<td>5 mg/m3</td>
</tr>
<tr>
<td>Impurities</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>Calcium oxide (CaO) (CAS 1305-78-8)</td>
<td>TWA</td>
<td>2 mg/m3</td>
</tr>
<tr>
<td>Crystalline Silica (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.05 mg/m3</td>
</tr>
</tbody>
</table>

**Biological limit values**

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

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

**Eye/face protection**

Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter. Applicable for industrial settings only.

**Skin protection**

**Hand protection**

Wear appropriate chemical resistant gloves. Applicable for industrial settings only.

**Other**

Wear appropriate chemical resistant clothing. Applicable for industrial settings only.

**Respiratory protection**

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Applicable for industrial settings only.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

- Physical state: Solid.
- Form: Powder.
- Odor: Not available.
- Odor threshold: Not available.
- pH: 10 - 11
- Melting point/freezing point: Not available.
- Initial boiling point and boiling range: Not available.
- Flash point: Not available.
- Evaporation rate: Not available.
- Flammability (solid, gas): Not available.

Upper/lower flammability or explosive limits

- Flammability limit - lower (%): Not available.
- Flammability limit - upper (%): Not available.
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: Not available.

Solubility(ies)

- Solubility (water): Not available.
- Partition coefficient (n-octanol/water): Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

Other information

- Explosive properties: Not explosive.
- Oxidizing properties: Not oxidizing.
- Specific gravity: 2.18 estimated

10. Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.


Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

- Inhalation: Harmful if inhaled.
Skin contact
No adverse effects due to skin contact are expected.

Eye contact
Causes serious eye irritation.

Ingestion
Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity
Harmful if inhaled.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM HYDROXIDE (CAS 1305-62-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>7340 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization
Not a respiratory sensitizer.

Skin sensitization
May cause irritation. Powder may irritate skin.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity
Crystalline Silica (CAS 14808-60-7) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Crystalline Silica (CAS 14808-60-7) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens
Crystalline Silica (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM HYDROXIDE (CAS 1305-62-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>160 mg/L, 96 Hours</td>
</tr>
<tr>
<td></td>
<td>Zambezi barbel</td>
<td>33.8844 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste
disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some
product residues. This material and its container must be disposed of in a safe manner (see:
Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is
emptied. Empty containers should be taken to an approved waste handling site for recycling or
disposal.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to
Not applicable.

Annex II of MARPOL 73/78 and
the IBC Code

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Crystalline Silica (CAS 14808-60-7)  Cancer
lung effects
immune system effects
kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No (Exempt)

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
California Proposition 65
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.

California Proposition 65 - CRT: Listed date/Carcinogenic substance
Crystalline Silica (CAS 14808-60-7)  Listed: October 1, 1988

Material name: HERCUL-EZ
16010    Version #: 03    Revision date: 26-September-2018    Issue date: 22-September-2017
Crystalline Silica (CAS 14808-60-7)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
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<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
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<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
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<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
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</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
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<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Issue date</th>
<th>22-September-2017</th>
</tr>
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<tbody>
<tr>
<td>Revision date</td>
<td>26-September-2018</td>
</tr>
<tr>
<td>Version #</td>
<td>03</td>
</tr>
<tr>
<td>HMIS® ratings</td>
<td></td>
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<td>Health: 3</td>
<td></td>
</tr>
<tr>
<td>Flammability: 0</td>
<td></td>
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<tr>
<td>Physical hazard: 0</td>
<td></td>
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<tr>
<td>NFPA ratings</td>
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<tr>
<td>Health: 3</td>
<td></td>
</tr>
<tr>
<td>Flammability: 0</td>
<td></td>
</tr>
<tr>
<td>Instability: 0</td>
<td></td>
</tr>
</tbody>
</table>

Disclaimer

CETCO, an MTI Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information

Hazard(s) identification: Prevention