SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form: Mixture
Product name: KD-DOL
CAS No: Mixture
Product code: 5003
Other means of identification: Dolomite Burned Brick

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Refractory

1.3. Details of the supplier of the safety data sheet
Resco Products, Inc.
One Robinson Plaza, Suite 300
6600 Steubenville Pike
Pittsburgh, PA 15205 - United States
412-494-4491
www.rescoproducts.com

1.4. Emergency telephone number
Emergency number: EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300
Outside USA & Canada +1 703-741-5970

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin Corr. 1A H314
Carc. 1A H350

Full text of H-phrases: see section 16

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US):

- GHS05
- GHS08

Signal word (GHS-US): Danger
Hazard statements (GHS-US):
- H314 - Causes severe skin burns and eye damage
- H350 - May cause cancer (Dust when sawing or tear out, Inhalation)

Precautionary statements (GHS-US):
- P202 - Do not handle until all safety precautions have been read and understood
- P280 - Wear Safety shoes, eye protection, protective gloves, protective clothing
- P223 - Do not allow contact with water
- Avoid contact with the skin and the eyes
- P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN: Gently wash with plenty of soap and water
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
- P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
- P260 - Do not breathe Dust when sawing or tear out

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>calcium oxide</td>
<td>(CAS No) 1305-78-8</td>
<td>50-75</td>
<td>Skin Corr. 1A, H314</td>
</tr>
<tr>
<td>Magnesium Oxide</td>
<td>(CAS No) 1309-48-4</td>
<td>20-50</td>
<td>Not classified</td>
</tr>
<tr>
<td>cristobalite</td>
<td>(CAS No) 14464-46-1</td>
<td>1-5</td>
<td>Carc. 1A, H350</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation: Dust when sawing or tear out. Remove the victim into fresh air.
First aid measures after skin contact: Gently wash with plenty of soap and water.
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. If eye irritation persists: Get medical advice/attention.
First aid measures after ingestion: Do NOT induce vomiting. Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after skin contact: May cause moderate irritation.
Symptoms/injuries after eye contact: Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Carbon dioxide. Dry powder. Dry sand.
Unsuitable extinguishing media: Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Reactions involving a fire hazard: see "Reactivity Hazard".
Reactivity: Reacts exothermically with water (moisture). Reacts with water to form Ca(OH)2, Mg(OH)2, and heat. Reacts with acids to form calcium salts while generating heat.

5.3. Advice for firefighters
Firefighting instructions: When cooling/extinguishing: no water in the substance.
Protection during firefighting: Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Avoid contact with skin and eyes.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment.

6.2. Environmental precautions
No additional information available

6.3. Methods and material for containment and cleaning up
For containment: On land, sweep or shovel into suitable containers.
Methods for cleaning up: Collect spillage.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Avoid contact with eyes. Contact lenses should be removed.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store this product in a dry location where it can be protected from the elements. Protect from moisture.
Incompatible products: Acids; reactive fluoridated, brominated, or phosphorous compounds; aluminum (may form hydrogen gas); reactive metals; organic acid anhydrides; nitro-organic compounds; interhalogenated compounds.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD-DOL (Mixture)</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Magnesium Oxide (1309-48-4)</td>
<td>ACGIH TWA (mg/m³) 10 mg/m³</td>
<td>OSHA Not applicable</td>
</tr>
<tr>
<td>Calcium Oxide (1305-78-8)</td>
<td>ACGIH TWA (mg/m³) 2 mg/m³</td>
<td>OSHA Not applicable</td>
</tr>
<tr>
<td>Cristobalite (14464-46-1)</td>
<td>ACGIH TWA (mg/m³) 0.025 mg/m³ respirable dust</td>
<td>OSHA PEL (TWA) (mg/m³) 0.05 mg/m³ respirable dust</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
No additional information available
### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Solid in various shapes.</td>
</tr>
<tr>
<td>Colour</td>
<td>brown</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 2500 °F</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density at 20 °C</td>
<td>2.85 - 2.95</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Reacts with water to form Ca(OH)2, Mg(OH)2, and heat.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reacts exothermically with water (moisture). Reacts with water to form Ca(OH)2, Mg(OH)2, and heat. Reacts with acids to form calcium salts while generating heat.

#### 10.2. Chemical stability

No additional information available

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Water, humidity.

#### 10.5. Incompatible materials

Acids.

#### 10.6. Hazardous decomposition products

Thermal decomposition generates: Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**Magnesium Oxide (1309-48-4)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg (Rat; Literature study)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg bodyweight (Rabbit; Literature study)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation: Not classified

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: May cause cancer (Dust when sawing or tear out, Inhalation).

**cristobalite (14464-46-1)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>1 - Carcinogenic to humans</td>
</tr>
</tbody>
</table>

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Symptoms/injuries after skin contact : May cause moderate irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.

### SECTION 12: Ecological information

#### 12.1. Toxicity

calcium oxide (1305-78-8)

<table>
<thead>
<tr>
<th>LC50 fish 1</th>
<th>1070 mg/l (96 h; Cyprinus carpio)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 1</td>
<td>159.6 mg/l (24 h; Crustacea)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>240 mg/l (24 h; Gambusia affinis)</td>
</tr>
<tr>
<td>TLM fish 1</td>
<td>240 ppm (24 h; Gambusia affinis)</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

**Magnesium Oxide (1309-48-4)**

Persistence and degradability | Biodegradability: not applicable. No (test) data on mobility of the substance available.
ThOD | Not applicable (inorganic)

calcium oxide (1305-78-8)

Persistence and degradability | Biodegradability: not applicable.
Biochemical oxygen demand (BOD) | Not applicable
Chemical oxygen demand (COD) | Not applicable
ThOD | Not applicable
BOD (% of ThOD) | Not applicable

cristobalite (14464-46-1)

Persistence and degradability | Biodegradability: not applicable.
Biochemical oxygen demand (BOD) | Not applicable
Chemical oxygen demand (COD) | Not applicable
ThOD | Not applicable
BOD (% of ThOD) | Not applicable

#### 12.3. Bioaccumulative potential

**Magnesium Oxide (1309-48-4)**

Bioaccumulative potential | Bioaccumulation: not applicable.

calcium oxide (1305-78-8)

Bioaccumulative potential | Not bioaccumulative.

cristobalite (14464-46-1)

Log Pow | Not applicable
Bioaccumulative potential | No bioaccumulation data available.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

No additional information available

### SECTION 14: Transport information

**Department of Transportation (DOT)**

In accordance with DOT
Not regulated for transport

**Additional information**

Other information : No supplementary information available.

**ADR**

No additional information available

**Transport by sea**

No additional information available

**Air transport**

No additional information available
### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

**KD-DOL (Mixture)**

- Not listed on the United States TSCA (Toxic Substances Control Act) inventory

**cristobalite (14464-46-1)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

**CANADA**

- WHMIS Classification: D2A

**EU-Regulations**

- No additional information available

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

- No additional information available

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

- Not classified

**National regulations**

- No additional information available

#### 15.3. US State regulations

**KD-DOL (Mixture)**

- **U.S. - California - Proposition 65 - Other information**
  
  This product contains crystalline silica, a chemical known to the state of California to cause cancer.

**cristobalite (14464-46-1)**

- **U.S. - California - Proposition 65 - Carcinogens List**

- **U.S. - California - Proposition 65 - Developmental Toxicity**

- **U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

- **U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

- **No significance risk level (NSRL)**

  - Yes: No
  - No: No
  - No: No
  - No: No

**cristobalite (14464-46-1)**

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

### SECTION 16: Other information

**Full text of H-phrases:**

<table>
<thead>
<tr>
<th>H-phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity, Category 1A</td>
<td>Carcinogenicity, Category 1A</td>
</tr>
<tr>
<td>Skin corrosion/irritation, Category 1A</td>
<td>Skin corrosion/irritation, Category 1A</td>
</tr>
<tr>
<td>Causes severe skin burns and eye damage</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>May cause cancer</td>
<td>May cause cancer</td>
</tr>
</tbody>
</table>

**SDS US (GHS HazCom 2012)**

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