SECTION 1: Identification

1.1. Identification
- Product form: Mixture
- Product name: Rescocast 3-35PC
- CAS-No.: Mixture
- Product code: 0323
- Other means of identification: Alumina-Silicate Cement Bonded Castable

1.2. Recommended use and restrictions on use
- Use of the substance/mixture: Refractory
- Recommended use: Industrial use

1.3. Supplier
- Resco Products, Inc.
  One Robinson Plaza, Suite 300
  6600 Steubenville Pike
  Pittsburgh, PA 15205 - United States
  412-494-4491
  SDS@RescoProducts.com - 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: Hazard(s) identification

2.1. Classification of the substance or mixture
- GHS US classification:
  - Skin corrosion/irritation Category 2: H315 - Causes skin irritation
  - Serious eye damage/eye irritation Category 2B: H320 - Causes eye irritation
  - Carcinogenicity Category 1A: H350 - May cause cancer (Inhalation)

- Full text of H statements: see section 16

2.3. Other hazards which do not result in classification
- No additional information available

2.4. Unknown acute toxicity (GHS US)
- Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
- Not applicable

3.2. Mixtures
- Calcium Aluminate Cement (CAS-No.) 65997-16-2: 50 – 75% Skin Irrit. 2, H315
- quartz (CAS-No.) 14808-60-7: 5 – 10% Eye Irrit. 2B, H320
- cristobalite (CAS-No.) 14464-46-1: 1 – 5% Carc. 1A, H350

- Full text of hazard classes and H-statements: see section 16

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: Allow affected person to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
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.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms:
Symptoms/effects after inhalation: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation. 
Symptoms/effects after skin contact: Causes skin irritation.
Symptoms/effects after eye contact: Causes eye irritation.

4.3. Immediate medical attention and special treatment, if necessary
No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media
Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: In case of fire, all extinguishing media allowed.

5.2. Specific hazards arising from the chemical
Fire hazard: Not flammable.

5.3. Special protective equipment and precautions for fire-fighters
Firefighting instructions: Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Do not breathe dust.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: On land, sweep or shovel into suitable containers. Minimize generation of dust.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Avoid raising dust. Avoid contact with skin and eyes. Do not breathe dust. 
Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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.
Incompatible products: Strong bases. Strong acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Rescocast 3-35PC (Mixture)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calcium Aluminate Cement (65997-16-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>cristobalite (14464-46-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA - ACGIH - Occupational Exposure Limits</td>
</tr>
<tr>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>USA - OSHA - Occupational Exposure Limits</td>
</tr>
<tr>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>quartz (14808-60-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA - ACGIH - Occupational Exposure Limits</td>
</tr>
<tr>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>USA - OSHA - Occupational Exposure Limits</td>
</tr>
<tr>
<td>Local name</td>
</tr>
<tr>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>Remark (OSHA)</td>
</tr>
</tbody>
</table>
8.2. **Appropriate engineering controls**

Appropriate engineering controls: Provide adequate ventilation to minimize dust concentrations.

8.3. **Individual protection measures/Personal protective equipment**

**Personal protective equipment:**
Avoid all unnecessary exposure.

**Hand protection:**
Wear protective gloves.

**Eye protection:**
Chemical goggles or safety glasses

**Skin and body protection:**
Wear suitable protective clothing

**Respiratory protection:**
Wear appropriate mask

**Other information:**
Do not eat, drink or smoke during use.

### 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>Granular mixture</td>
</tr>
<tr>
<td>Color</td>
<td>brown</td>
</tr>
<tr>
<td>Odor</td>
<td>earthy</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 2000 °F</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Critical temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Critical pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (ether=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor pressure at 50 °C</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>≈ 0.5</td>
</tr>
<tr>
<td>Solubility</td>
<td>Slightly soluble</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Pow)</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</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**

Hydraulic setting.

10.2. **Chemical stability**

Stable under normal conditions of use.

10.3. **Possibility of hazardous reactions**

Not established.

10.4. **Conditions to avoid**

Avoid dust formation.

10.5. **Incompatible materials**

Strong acids. Strong bases.

10.6. **Hazardous decomposition products**

No additional information available
SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>May cause cancer (Inhalation).</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>IARC group</td>
<td>1 - Carcinogenic to humans</td>
</tr>
</tbody>
</table>

#### quarto (14808-60-7)

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Potential Adverse human health effects and symptoms</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Symptoms/effects after inhalation</td>
<td>May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation.</td>
</tr>
<tr>
<td>Symptoms/effects after skin contact</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>Causes eye irritation.</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

#### Rescocast 3-35PC (Mixture)

| Persistence and degradability | Not established. |

#### cristobalite (14464-46-1)

| Persistence and degradability | Mineral. Not applicable. |
| Chemical oxygen demand (COD)   | Not applicable           |
| ThOD                            | Not applicable           |
| BOD (% of ThOD)                 | Not applicable           |

#### quarto (14808-60-7)

| Persistence and degradability | Not applicable. |
| Chemical oxygen demand (BOD)   | Not applicable. |
| Chemical oxygen demand (COD)    | Not applicable. |
| ThOD                            | Not applicable. |

### 12.3. Bioaccumulative potential

#### Rescocast 3-35PC (Mixture)

| Bioaccumulative potential        | Not established. |

#### cristobalite (14464-46-1)

| Bioaccumulative potential        | No data available. |

#### quarto (14808-60-7)

| Bioaccumulative potential        | No data available. |

### 12.4. Mobility in soil

#### cristobalite (14464-46-1)

| Ecology - soil                   | No data available. |

### 12.5. Other adverse effects

| Effect on the global warming     | None known |
| Other information                | No other effects known. |

SECTION 13: Disposal considerations

### 13.1. Disposal methods

| Product/Packaging disposal recommendations | Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials                 | Avoid release to the environment. |
### SECTION 14: Transport information

#### Department of Transportation (DOT)
- Not regulated
- Transportation of Dangerous Goods
  - Not regulated
- Transport by sea
  - Not regulated
- Air transport
  - Not regulated

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations
- **Rescocast 3-35PC (Mixture)**
  - All components of this product are listed as Active, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 15.2. International regulations
- **CANADA**
  - **Calcium Aluminate Cement (65997-16-2)**
    - Listed on the Canadian DSL (Domestic Substances List)
  - **cristobalite (14464-46-1)**
    - Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations
- No additional information available

#### National regulations
- **quartz (14808-60-7)**
  - Listed on IARC (International Agency for Research on Cancer)

#### 15.3. US State regulations
- **Rescocast 3-35PC (Mixture)**
  - This product contains crystalline silica, a chemical known to the state of California to cause cancer. For more information go to WWW.P65Warnings.ca.gov

<table>
<thead>
<tr>
<th>Component</th>
<th>State or local regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cristobalite</td>
<td>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</td>
</tr>
<tr>
<td>Quartz</td>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
</tr>
</tbody>
</table>

### SECTION 16: Other information

#### Revision date
- 07/19/2021

#### Full text of H-phrases:
- **H315** 
  - Causes skin irritation
- **H320** 
  - Causes eye irritation
- **H350** 
  - May cause cancer

SDS US (GHS HazCom 2012)
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