SECTION 1: Identification

1.1. Identification
Product form: Mixture
Product name: QuikLite 3-35P
CAS-No.: Mixture
Product code: 0322
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- and EUH-statements: see section 16

2.2. GHS Label elements, including precautionary statements
GHS US labeling
Hazard pictograms (GHS US):

Signal word (GHS US): Danger
Hazard statements (GHS US):
H315 - Causes skin irritation
H320 - Causes eye irritation
H350 - May cause cancer (Inhalation)

Precautionary statements (GHS US):
P280 - Wear eye protection, Dust respirator, protective gloves.
P295+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P260 - Do not breathe dust.

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Aluminate Cement</td>
<td>(CAS-No.) 65997-16-2</td>
<td>50 – 75</td>
<td>Skin Irr. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irr. 2B, H320</td>
</tr>
<tr>
<td>quartz</td>
<td>(CAS-No.) 14808-60-7</td>
<td>1 – 5</td>
<td>Carc. 1A, H350</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 hazard classes, H- and EUH-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

QuikLite 3-35P (Mixture)

No additional information available

Calcium Aluminate Cement (65997-16-2)

No additional information available

cristobalite (14464-46-1)

USA - ACGIH - Occupational Exposure Limits

ACGIH TWA (mg/m³): 0.025 mg/m³ respirable dust

USA - OSHA - Occupational Exposure Limits

OSHA PEL (TWA) (mg/m³): 0.05 mg/m³ respirable dust

quartz (14808-60-7)

USA - ACGIH - Occupational Exposure Limits

ACGIH TWA (mg/m³): 0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)

USA - OSHA - Occupational Exposure Limits

Local name: Silica, crystalline quartz, respirable dust

OSHA PEL (TWA) (mg/m³): 0.05 mg/m³ respirable dust

Remark (OSHA): (3) See Table Z-3.
### 8.2. Appropriate engineering controls

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

### 8.3. Individual protection measures

**Personal protective equipment:**

**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.

---

### 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>≈ 1.4</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>
</tbody>
</table>
SECTION 11: Toxicological information

11.1. Information on toxicological effects

- Acute toxicity (oral) : Not classified
- Acute toxicity (dermal) : Not classified
- Acute toxicity (inhalation) : Not classified
- Skin corrosion/irritation : Causes skin irritation.
- Serious eye damage/irritation : Causes eye irritation.
- Respiratory or skin sensitization : Not classified
- Germ cell mutagenicity : Not classified
- Carcinogenicity : May cause cancer (Inhalation).

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>quartz (14808-60-7)</td>
<td>1 - Carcinogenic to humans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance</th>
<th>Reproductive toxicity</th>
<th>STOT-single exposure</th>
<th>STOT-repeated exposure</th>
<th>Aspiration hazard</th>
<th>Viscosity, kinematic</th>
<th>Potential Adverse human health effects and symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not classified</td>
<td>Not classified</td>
<td>Not classified</td>
<td>Not classified</td>
<td>No data available</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

| 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. |

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

QuikLite 3-35P (Mixture)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not established.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
<th>Chemical oxygen demand (COD)</th>
<th>ThOD</th>
<th>BOD (% of ThOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>cristobalite (14464-46-1)</td>
<td>Mineral. Not applicable.</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>quartz (14808-60-7)</td>
<td>Not applicable.</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>cristobalite (14464-46-1)</td>
<td>No data available.</td>
</tr>
<tr>
<td>quartz (14808-60-7)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

QuikLite 3-35P (Mixture)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not established.</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Substance</th>
<th>Ecology - soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>cristobalite (14464-46-1)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

12.5. Other adverse effects

<table>
<thead>
<tr>
<th>Substance</th>
<th>Effect on the global warming</th>
<th>Other information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None known</td>
<td>No other effects known.</td>
</tr>
</tbody>
</table>

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**

**Transportation of Dangerous Goods**
- Not regulated

**Transport by sea**
- Not regulated

**Air transport**
- Not regulated

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**SECTION 15: Regulatory information**

**15.1. US Federal regulations**

**QuikLite 3-35P (Mixture)**

- All components of this product are listed, 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**

**QuikLite 3-35P (Mixture)**

<table>
<thead>
<tr>
<th>Component</th>
<th>State or local regulations</th>
<th>NSRL Risk level</th>
<th>MADL Risk level</th>
</tr>
</thead>
<tbody>
<tr>
<td>cristobalite</td>
<td>U.S. - California - Proposition 65 - Other information</td>
<td>No significant risk level (NSRL)</td>
<td>Maximum allowable dose level (MADL)</td>
</tr>
<tr>
<td>quartz</td>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
<td>No significant risk level (NSRL)</td>
<td>Maximum allowable dose level (MADL)</td>
</tr>
</tbody>
</table>

---

**SECTION 16: Other information**

**Other information**
- Report language name, English. In the event of any conflict between English and other language versions, the English version shall prevail.

Full text of H-phrases:

- **H315**: Causes skin irritation
- **H320**: Causes eye irritation
- **H350**: May cause cancer

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**SDS US (GHS HazCom 2012)**

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.