SECTION 1: Identification

1.1. Identification
Product form: Mixture
Product name: Rescocast 3-20R
CAS-No.: Mixture
Product code: 0318
Other means of identification: Alumina-Silicate Cement Bonded Castable

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

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)

2.2. GHS Label elements, including precautionary statements
GHS-US labeling
- Hazard pictograms (GHS-US): ! Warning !
- Signal word (GHS-US): Danger
- Hazard statements (GHS-US): H315 - Causes skin irritation
- H320 - Causes eye irritation
- H350 - May cause cancer (Inhalation)
  P305+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

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 Irrit. 2, H315 Eye Irrit. 2B, H320</td>
</tr>
<tr>
<td>cristobalite</td>
<td>(CAS-No.) 14464-46-1</td>
<td>1 - 5</td>
<td>Carc. 1A, H350</td>
</tr>
<tr>
<td>quartz</td>
<td>(CAS-No.) 14808-60-7</td>
<td>1 - 5</td>
<td>Carc. 1A, H350</td>
</tr>
</tbody>
</table>

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 victim 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: Based on available data, the classification criteria are not met.
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: No unsuitable extinguishing media known.

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

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

Calcium Aluminate Cement (65997-16-2)
Not applicable

cristobalite (14464-46-1)
ACGIH ACGIH TWA (mg/m³) 0.025 mg/m³ (Silica-Crystalline Cristobalite; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
OSHA OSHA PEL (TWA) (mg/m³) 0.05 mg/m³ respirable dust

quartz (14808-60-7)
ACGIH ACGIH TWA (mg/m³) 0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
OSHA OSHA PEL (TWA) (mg/m³) 0.05 mg/m³ Respirable fraction
OSHA Remark (OSHA) (3) See Table Z-3.

8.2. Appropriate engineering controls
No additional information available

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

- **Physical state:** Solid
- **Appearance:** Granular mixture.
- **Color:** Brown
- **Odor:** Earthy Odor
- **Odor threshold:** Not applicable
- **pH:** No data available
- **Melting point:** > 2000 °F
- **Freezing point:** Not applicable
- **Boiling point:** Not applicable
- **Critical temperature:** Not applicable
- **Critical pressure:** Not applicable
- **Flash point:** Not applicable
- **Relative evaporation rate (butyl acetate=1):** Not applicable
- **Relative evaporation rate (ether=1):** Not applicable
- **Flammability (solid, gas):** Non flammable.
- **Vapor pressure:** Not Applicable
- **Vapor pressure at 50 °C:** Not Applicable
- **Relative vapor density at 20 °C:** No data available
- **Relative density:** ≈ 0.4
- **Solubility:** Slightly soluble.
- **Log Pow:** No data available
- **Auto-ignition temperature:** Not applicable
- **Decomposition temperature:** No data available
- **Viscosity:** Not Applicable
- **Viscosity, kinematic:** Not Applicable
- **Viscosity, dynamic:** Not Applicable
- **Explosion limits:** Not applicable
- **Explosive properties:** No data available
- **Oxidizing properties:** No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Hydraulic setting.

#### 10.2. Chemical stability

Not established.

#### 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

- **Acute toxicity:** Not classified
- **Skin corrosion/irritation:** Causes skin irritation.
- **Serious eye damage/irritation:** Causes eye irritation.
- **Respiratory or skin sensitization:** Not classified
Rescocast 3-20R
Safety Data Sheet

Germ cell mutagenicity: Not classified
Carcinogenicity: May cause cancer (Inhalation).

**cristobalite (14464-46-1)**
IARC group: 1 - Carcinogenic to humans

**quartz (14808-60-7)**
IARC group: 1 - Carcinogenic to humans
Reproductive toxicity: Not classified
Specific target organ toxicity – single exposure: Not classified
Specific target organ toxicity – repeated exposure: Not classified
Aspiration hazard: Not classified
Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.
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

**Rescocast 3-20R (Mixture)**
Persistence and degradability: Not established.

**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

**quartz (14808-60-7)**
Persistence and degradability: Biodegradability: not applicable.
Biochemical oxygen demand (BOD): Not applicable
Chemical oxygen demand (COD): Not applicable
ThOD: Not applicable

12.3. Bioaccumulative potential

**Rescocast 3-20R (Mixture)**
Bioaccumulative potential: Not established.

**cristobalite (14464-46-1)**
Bioaccumulative potential: No test data available.

**quartz (14808-60-7)**
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: None known
Other information: Avoid release to the environment.

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)
In accordance with DOT
Not regulated

Transportation of Dangerous Goods
Not regulated

Transport by sea
Not regulated
Air transport
Not regulated
**Rescocast 3-20R**

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

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**

No additional information available

**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 3-20R (Mixture)**

<table>
<thead>
<tr>
<th>Substance</th>
<th>U.S. - California - Proposition 65 - Other information</th>
<th>This product contains crystalline silica, a chemical known to the state of California to cause cancer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cristobalite (14464-46-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>quartz (14808-60-7)</em></td>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>cristobalite (14464-46-1)</td>
<td></td>
<td></td>
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<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**quartz (14808-60-7)**

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

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### SECTION 16: Other information

**Revision date**: 10/17/2018

**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

**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.