**SECTION 1: Identification**

1.1. Identification

- **Product form**: Mixtures
- **Product name**: Pacocast 28 LI Coarse
- **CAS No**: Mixture
- **Product code**: 0470
- **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)

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

**GHS-US labeling**

- **Signal word (GHS-US)**: Danger
- **Hazard pictograms (GHS-US)**: 
  - GS07
  - GS08
- **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
  - 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 persists: 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>10 - 20</td>
<td>Skin Irr. 2, H315 Eye Irr. 2B, H320</td>
</tr>
<tr>
<td>quartz</td>
<td>(CAS No) 14808-60-7</td>
<td>10 - 20</td>
<td>Carc. 1A, H350</td>
</tr>
<tr>
<td>cristobalite</td>
<td>(CAS No) 14464-46-1</td>
<td>10 - 20</td>
<td>Carc. 1A, H350</td>
</tr>
</tbody>
</table>

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).
Pacocast 28 LI Coarse
Safety Data Sheet

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.

4.2. Most important symptoms and effects (acute and delayed)
Symptoms/injuries after inhalation: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/injuries after skin contact: Causes skin irritation.
Symptoms/injuries 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.

6.2. 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.
Hygiene measures: Avoid contact with skin and eyes. Do not breathe dust. 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

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

<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>light brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Earthy Odor</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>$&gt; 2000 , ^\circ F$</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>No data available</td>
</tr>
<tr>
<td>Relative density of saturated gas/air mixture</td>
<td>$\approx 1.5$</td>
</tr>
<tr>
<td>Solubility</td>
<td>Slightly soluble.</td>
</tr>
<tr>
<td>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</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not Applicable</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
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

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</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>
</tbody>
</table>
### Section 1: Identification

**Product identifier**
Pacocast 28 LI Coarse

**Description**
Safety Data Sheet

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

**Date**
12/02/2016

**Language**
EN (English US)

### Section 2: Signal words

**Hazard statements**

- **Explosive**
  - Not classified

- **Toxic**
  - Not classified

- **Health hazard**
  - Not classified

- **Environmental hazard**
  - Not classified

**Precautionary statements**

- **Emergency procedures**
  - Not classified

- **Firefighting**
  - Not classified

- **Spill procedures**
  - Not classified

- **Personal protection**
  - Not classified

- **First aid measures**
  - Not classified

- **Exposure controls/Personal protective equipment**
  - Not classified

- **Stability**
  - Not classified

- **Spontaneous combustion**
  - Not classified

- **Inherent dangers**
  - Not classified

### Section 3:危险性分类和标签

**IARC group**
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/injuries after inhalation**
May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation.

**Symptoms/injuries after skin contact**
Causes skin irritation.

**Symptoms/injuries after eye contact**
Causes eye irritation.

### Section 12: Ecological information

#### 12.1. Toxicity
No additional information available

#### 12.2. Persistence and degradability

**Pacocast 28 LI Coarse (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. No (test) data on mobility of the substance available.

Biochemical oxygen demand (BOD) Not applicable

Chemical oxygen demand (COD) Not applicable

ThOD Not applicable

#### 12.3. Bioaccumulative potential

**Pacocast 28 LI Coarse (Mixture)**
Bioaccumulative potential Not established.

**cristobalite (14464-46-1)**
Bioaccumulative potential No bioaccumulation 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**
- No known effects from this product.

**GWPmix comment**
- 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

**TDG**
Not regulated

**Transport by sea**
Not regulated

**Air transport**
Not regulated
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

<table>
<thead>
<tr>
<th>Substance</th>
<th>US - California - Proposition 65 - Other information</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>Non-significant risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>cristobalite (14464-46-1)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Non-significant risk level (NSRL)</td>
</tr>
<tr>
<td>quartz (14808-60-7)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Non-significant risk level (NSRL)</td>
</tr>
</tbody>
</table>

15.3. US State regulations

Pacocast 28 LI Coarse (Mixture)

<table>
<thead>
<tr>
<th>Substance</th>
<th>U.S. - California - Proposition 65 - Other information</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>Non-significant risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>cristobalite (14464-46-1)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Non-significant risk level (NSRL)</td>
</tr>
<tr>
<td>quartz (14808-60-7)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Non-significant risk level (NSRL)</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Revision date : 12/02/2016

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:

<table>
<thead>
<tr>
<th>H-Phrase</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)
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