

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/15/2015 Revision date: 8/5/2024 Supersedes: 7/19/2021

| .1. Identification  |   |  |  |  |
|---|---|--|--|--|
|   |   |  |  |  |
|   | : Mixture   |  |  |  |
| roduct name   | : Rescocast 9LI PC  |  |  |  |
| AS-No.  | : Mixture   |  |  |  |
| oduct code  |   |  |  |  |
| ther means of identification  | : Alumina-Silicate Cement Bonded Castable   |  |  |  |
| 2. Recommended use and restrictions on the substance/mixture  | : Refractory  |  |  |  |
| ecommended use  | : Industrial use  |  |  |  |
| .3. Supplier  |   |  |  |  |
| esco Products, Inc.<br>ne Robinson Plaza, Suite 300<br>500 Steubenville Pike<br>ttsburgh, PA, 15205<br>nited States<br>412-494-4491<br><u>DS@RescoProducts.com</u> - <u>WWW.RescoProducts.co</u>  | <u>com</u>  |  |  |  |
| .4. Emergency telephone number  |   |  |  |  |
| nergency number   | : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300<br>Outside USA & Canada +1 703-741-5970 |  |  |  |
| ECTION 2: Hazard(s) identification  |   |  |  |  |
| 1. Classification of the substance or mixtu   | Ire   |  |  |  |
| HS US classification  | LIGHT Or was all in initialized   |  |  |  |
| kin corrosion/irritation Category 2<br>erious eye damage/eye irritation Category 2B<br>arcinogenicity Category 1A<br>Ill text of H statements : see section 16  | H315Causes skin irritationH320Causes eye irritationH350May cause cancer (Inhalation)            |  |  |  |
| 2. GHS Label elements, including precaution   | ionary statements   |  |  |  |
| HS US labeling<br>azard pictograms (GHS US)   |   |  |  |  |
| gnal word (GHS US)  | : Danger  |  |  |  |
| azard statements (GHS US)   | : H315 - Causes skin irritation   |  |  |  |
|   | H320 - Causes eye irritation  |  |  |  |
| autionary statements (GHS US)       H350 - May cause cancer (Inhalation)         autionary statements (GHS US)       P280 - Wear eye protection, Dust respirator, protective gloves.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove<br>contact lenses, if present and easy to do. Continue rinsing.<br>P332+P313 - If skin irritation occurs: Get medical advice/attention.<br>P337+P313 - If eye irritation persists: Get medical advice/attention. |   |  |  |  |
| .3. Other hazards which do not result in cla  | P260 - Do not breathe dust.   |  |  |  |
| o additional information available  |   |  |  |  |
| .4. Unknown acute toxicity (GHS US)   |   |  |  |  |
| o additional information available  |   |  |  |  |
| ECTION 3: Composition/Information o   | n ingredients   |  |  |  |
| 1. Substances   |   |  |  |  |
| ot applicable   |   |  |  |  |
| .2. Mixtures  |   |  |  |  |
| lame  | Product identifier % GHS US classification  |  |  |  |
| Calcium Aluminate Cement  | CAS-No.: 65997-16-2 20 – 50 Skin Irrit. 2, H315   |  |  |  |
|   | Eye Irrit. 2B, H320   |  |  |  |
| uartz   | CAS-No.: 14808-60-7 10 – 20 Carc. 1A, H350  |  |  |  |
|   | CAS-No.: 14464-46-1 5 – 10 Carc. 1A, H350   |  |  |  |

### Safety Data Sheet

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

| 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  |
| First-aid measures after inhalation  | <ul><li>(show the label where possible).</li><li>Allow affected person to breathe fresh air. Allow the victim to rest.</li></ul>  |
| 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  |
| First-aid measures after ingestion   | and easy to do. Continue rinsing.<br>: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.   |
| 4.2. Most important symptoms and effects (                                   |   |
| Potential Adverse human health effects and                                   | : Danger of serious damage to health by prolonged exposure through inhalation.  |
| symptoms   | . Danger of senous damage to health by prolonged exposure through hinalation.   |
| Symptoms/effects after inhalation  | : Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.  |
| Symptoms/effects after skin contact  | : Causes skin irritation.   |
| Symptoms/effects after eye contact   | : Causes eye irritation.  |
| 4.3. Immediate medical attention and specia                                  | al treatment, if necessary  |
| No additional information available  |   |
| SECTION 5: Fire-fighting measures  |   |
| 5.1. Suitable (and unsuitable) extinguishing                                 | j media   |
| Suitable extinguishing media<br>Unsuitable extinguishing media               | : Use extinguishing media appropriate for surrounding fire.<br>: In case of fire, all extinguishing media allowed.  |
| 5.2. Specific hazards arising from the chem                                  |   |
| Fire hazard  | : Not flammable.  |
| 5.3. Special protective equipment and preca                                  |   |
| Firefighting instructions  | : Fight fire with normal precautions from a reasonable distance.  |
| Protection during firefighting   | : Do not enter fire area without proper protective equipment, including respiratory protection.   |
| SECTION 6: Accidental release measur   | 'es   |
| 6.1. Personal precautions, protective equip                                  | ment and emergency procedures   |
| 6.1.1. For non-emergency personnel   |   |
| Emergency procedures<br>6.1.2. For emergency responders                      | : Do not breathe dust. Avoid contact with skin and eyes.  |
| Protective equipment   | : Equip cleanup crew with proper protection.  |
| Emergency procedures   | : Ventilate area. On land, sweep or shovel into suitable containers.  |
| 6.2. Environmental precautions   |   |
| Prevent entry to sewers and public waters.                                   |   |
| 6.3. Methods and material for containment                                    |   |
| 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 prot                           | tection.  |
| 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   | <ul> <li>Avoid contact with skin and eyes. Do not breathe dust.</li> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> </ul> |
| 7.2. Conditions for safe storage, including a                                |   |
| 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/persona   | al protection   |
| 8.1. Control parameters  |   |
| Rescocast 9LI PC (Mixture)   |   |
| No additional information available  |   |
|  |   |
| Calcium Aluminate Cement (65997-16-2)<br>No additional information available |   |

### Safety Data Sheet

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

| cristobalite (14464-46-1)   |  |
|---|--|
| USA - ACGIH - Occupational Exposure Limits                        |  |
| ACGIH OEL TWA   | 0.025 mg/m <sup>3</sup> respirable dust  |
| USA - OSHA - Occupational Exposure Limits                         |  |
| OSHA PEL (TWA) [1]  | 0.05 mg/m <sup>3</sup> respirable dust   |
| quartz (14808-60-7)   |  |
| USA - ACGIH - Occupational Exposure Limits                        |  |
| ACGIH OEL TWA   | 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) [1]  | 0.05 mg/m <sup>3</sup> 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/Persona                       | al protective equipment  |
| Personal protective equipment:<br>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:<br>Do not eat, drink or smoke during use.      |  |
| <b>SECTION 9: Physical and chemical pro</b>                       | perties  |
| 9.1. Information on basic physical and chem                       |  |
| Physical state  | : Solid  |
| Appearance  | : Granular mixture.  |
| Color   | : brown  |
| Odor<br>Odor throshold  | : earthy<br>: No data available  |
| Odor threshold<br>pH  | : No data available : $\approx 10.5$   |
| pH solution concentration   | . ≈ 10.5<br>: 10 %   |
| Melting point   | : > 2000 °F  |
| Freezing point  | : No data available  |
| Boiling point   | : No data available  |
| Flash point   | : No data available  |
| Relative evaporation rate (butyl acetate=1)                       | : No data available  |
| Flammability (solid, gas)   | : Not flammable.   |
| Vapor pressure  | : No data available  |
| Relative vapor density at 20°C                                    | : No data available  |
| Relative density  | : ≈0.9   |
| Solubility  | : Slightly soluble.  |
| Partition coefficient n-octanol/water (Log Pow)                   | : No data available  |
| Auto-ignition temperature   | : No data available  |
| Decomposition temperature   | : No data available  |
| Viscosity, kinematic<br>Viscosity, dynamic                        | : Not Applicable<br>: No data available  |
| Explosion limits  | : No data available  |
| Explosion innus<br>Explosive properties                           | : No data available  |
| Oxidizing properties  | : No data available  |
|   |  |
|   |  |
| 9.2. Other information  |  |

No additional information available

### Safety Data Sheet

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

| 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                 |  |
|  | Not classified   |
| Acute toxicity (dermal) :<br>Acute toxicity (inhalation) : | Not classified<br>Not classified   |
|  | Causes skin irritation.  |
|  | pH: ≈ 10.5   |
| Calcium Aluminate Cement (65997-16-2)                      |  |
| pH   | ≤ 13   |
| •  |  |
| cristobalite (14464-46-1)                                  | 1  |
| рН   | 6-7  |
| quartz (14808-60-7)  |  |
| рН   | 6 - 7  |
| Serious eye damage/irritation :                            | Causes eye irritation.<br>pH: ≈ 10.5   |
| Calcium Aluminate Cement (65997-16-2)                      |  |
|  |  |
| рН   | ≤ 13   |
| cristobalite (14464-46-1)                                  |  |
| рН   | 6 - 7  |
| quartz (14808-60-7)  |  |
| рН   | 6 - 7  |
| Respiratory or skin sensitization :                        | Not classified   |
| Germ cell mutagenicity :                                   | Not classified   |
| Carcinogenicity :  | May cause cancer (Inhalation).   |
| quartz (14808-60-7)  |  |
| IARC group   | 1 - Carcinogenic to humans   |
| Reproductive toxicity :                                    | Not classified   |
| STOT-single exposure :                                     | Not classified   |
| STOT-repeated exposure :<br>Aspiration hazard :            | Not classified   |
| Aspiration nazard :<br>Viscosity, kinematic :              | Not classified<br>Not Applicable   |
| Potential Adverse human health effects and                 | Danger of serious damage to health by prolonged exposure through inhalation.           |
| symptoms<br>Symptoms/effects after inhalation :            | Danger of serious damage to health by prolonged exposure through inhalation. May cause |
|  | cancer by inhalation.  |
|  | Causes skin irritation.  |
| Symptoms/effects after eye contact :                       | Causes eye irritation.   |

### Safety Data Sheet

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

| SECTION 12: Ecological information   |   |
|--|---|
|  |   |
| 12.1. Toxicity No additional information available   |   |
| 12.2. Persistence and degradability  |   |
| Rescocast 9LI PC (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  |
| quartz (14808-60-7)  |   |
| Persistence and degradability  | Not applicable.   |
| Biochemical oxygen demand (BOD)  | Not applicable  |
| Chemical oxygen demand (COD)   | Not applicable  |
| ThOD   | Not applicable  |
| 12.3. Bioaccumulative potential  |   |
| Rescocast 9LI PC (Mixture)   |   |
| Bioaccumulative potential  | Not established.  |
| cristobalite (14464-46-1)  |   |
| Bioaccumulative potential  | No data available.  |
| quartz (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  |   |
| 5  | None known<br>No other effects known.                                   |
| SECTION 13: Disposal considerations  |   |
| 13.1. Disposal methods   |   |
|  | Dispose in a safe manner in accordance with local/national regulations. |
| SECTION 14: Transport information  |   |
| In accordance with DOT / TDG / IMDG / IATA<br>Department of Transportation (DOT)<br>In accordance with DOT |   |
| Not regulated  |   |
| Transportation of Dangerous Goods Not regulated  |   |
| Transport by sea   |   |
| Not regulated<br>Air transport   |   |
| Not regulated  |   |

#### Safety Data Sheet

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

#### **SECTION 15: Regulatory information**

#### **15.1. US Federal regulations**

All components of this product are present and listed as Active 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 9LI PC (Mixture)

U.S. - California - Proposition 65 - Other information 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

| cristobalite (14464-46-                                  | 1)   |   |   |                                     |  |
|--|--|---|---|-------------------------------------|--|
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity<br>- Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity<br>- Male | No significant risk<br>level (NSRL) | Maximum allowable<br>dose level (MADL) |
| Yes  | No   | No  | No  |                                     |  |

| quartz (14808-60-7) |                        |                       |                       |                     |                   |
|---------------------|------------------------|-----------------------|-----------------------|---------------------|-------------------|
| U.S California -    | U.S California -       | U.S California -      | U.S California -      | No significant risk | Maximum allowable |
| Proposition 65 -    | Proposition 65 -       | Proposition 65 -      | Proposition 65 -      | level (NSRL)        | dose level (MADL) |
| Carcinogens List    | Developmental Toxicity | Reproductive Toxicity | Reproductive Toxicity |                     |                   |
| -                   |                        | - Female              | - Male                |                     |                   |
| Yes                 | No                     | No                    | No                    |                     |                   |

| Component  | State or local regulations   |  |
|--|--|--|
| Cristobalite (14464-46-1)  | 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                      |  |
| Quartz (14808-60-7)  | U.S New Jersey - Right to Know Hazardous Substance List                          |  |
| SECTION 16: Other information  |  |  |
| according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations |  |  |
| Revision date  | : 8/5/2024   |  |

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       |  |

Safety Data Sheet (SDS), USA

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.