

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 1/30/2019 Revision date: 3/26/2024 Supersedes: 2/1/2021 Version: 3.0

| SECTION 1: Identification  |   |  |  |
|--|---|--|--|
| 1.1. Identification  |   |  |  |
| Product form   | : Mixture   |  |  |
| Product name   | : P-7 Cement  |  |  |
| AS-No.   | : Mixture   |  |  |
| roduct code  | : 4896  |  |  |
| ther means of identification 2. Recommended use and restrictions o   | : Aluminum Silicate Speciality  |  |  |
| se of the substance/mixture  | : Refractory  |  |  |
| Recommended use  | : Industrial use  |  |  |
| .3. Supplier   |   |  |  |
| Resco Products, Inc.<br>Dne Robinson Plaza, Suite 300<br>6600 Steubenville Pike<br>Pittsburgh, PA, 15205<br>Jnited States<br>412-494-4491                          |   |  |  |
| SDS@RescoProducts.com - WWW.RescoProduct   | <u>s.com</u>  |  |  |
| 1.4. Emergency telephone number  |   |  |  |
| Emergency number   | : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300<br>Outside USA & Canada +1 703-741-5970   |  |  |
| SECTION 2: Hazard(s) identification  |   |  |  |
| 2.1. Classification of the substance or min  | xture   |  |  |
| GHS US classification  |   |  |  |
| Skin corrosion/irritation Category 2<br>Serious eye damage/eye irritation Category 2B<br>Carcinogenicity Category 1A<br>Full text of H statements : see section 16 | H315Causes skin irritationH320Causes eye irritationH350May cause cancer (Inhalation)  |  |  |
| 2.2. GHS Label elements, including preca   | utionary statements   |  |  |
| GHS US labeling<br>Hazard pictograms (GHS US)  |   |  |  |
| Signal word (GHS US)   | : Danger  |  |  |
| Hazard statements (GHS US)   | : H315 - Causes skin irritation<br>H320 - Causes eye irritation   |  |  |
| Precautionary statements (GHS US)  | <ul> <li>H350 - May cause cancer (Inhalation)</li> <li>P280 - Wear eye protection, protective gloves.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P260 - Do not breathe dust.</li> </ul> |  |  |
| 2.3. Other hazards which do not result in  | classification  |  |  |
| lo additional information available  |   |  |  |
| 2.4. Unknown acute toxicity (GHS US)   |   |  |  |
| lo additional information available  |   |  |  |
| SECTION 3: Composition/Information   | on ingredients  |  |  |
| 3.1. Substances  |   |  |  |
| lot applicable   |   |  |  |
| 3.2. Mixtures  |   |  |  |
| Name   | Product identifier % GHS US classification  |  |  |
| quartz   | CAS-No.: 14808-60-7 50 – 75 Carc. 1A, H350  |  |  |
| graphite   | CAS-No.: 14806-60-7 50 - 75 Carc. 1A, H350<br>CAS-No.: 7782-42-5 10 - 20 Not classified   |  |  |
| cristobalite   | $\begin{array}{c c c c c c c c c c c c c c c c c c c $  |  |  |
| Full text of hazard classes and H-statements : see   |   |  |  |

### 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. : Rinse mouth. Do NOT induce vomiting.  |
| 4.2. Most important symptoms and effects                 |   |
| Potential Adverse human health effects and               | : Based on available data, the classification criteria are not met.   |
| symptoms   |   |
| Symptoms/effects after inhalation                        | : May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure  |
| Symptoms/effects after skin contact                      | through inhalation.<br>: Causes skin irritation.  |
| Symptoms/effects after eye contact                       | : Causes eye irritation.  |
| 4.3. Immediate medical attention and spec                | cial treatment, if necessary  |
| No additional information available                      |   |
| SECTION 5: Fire-fighting measures                        |   |
| 5.1. Suitable (and unsuitable) extinguishin              | ng 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 cher              |   |
| Fire hazard  | : Not flammable. On heating/burning: release of carbon monoxide - carbon dioxide.   |
| 5.3. Special protective equipment and pre-               |   |
| Firefighting instructions Protection during firefighting | <ul> <li>No specific fire-fighting instructions required.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul> |
| SECTION 6: Accidental release measu                      | Ires  |
| 6.1. Personal precautions, protective equi               | pment 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                           |   |
| No additional information available                      |   |
| 6.3. Methods and material for containment                |   |
| For containment<br>Methods for cleaning up               | : Collect spillage.<br>: 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 pro        | otection.   |
| 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.<br>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<br>smoking and when leaving work.  |
| 7.2. Conditions for safe storage, including              | 0 0   |
| Storage conditions                                       | : Store in a dry place.   |
| SECTION 8: Exposure controls/perso                       | nal protection  |
| 8.1. Control parameters                                  |   |
| P-7 Cement (Mixture)                                     |   |
| 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   |
| graphite (7782-42-5)  |  |
| USA - ACGIH - Occupational Exposure Limits                        |  |
| ACGIH OEL TWA   | 2 mg/m <sup>3</sup> (Respirable fraction)  |
| quartz (14808-60-7)   |  |
| USA - ACGIH - Occupational Exposure Limits                        |  |
| ACGIH OEL TWA   | 0.025 mg/m <sup>3</sup> (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                                  | : No additional information available.   |
| 8.3. Individual protection measures/Perso                         |  |
| 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:  |  |
| Do not eat, drink or smoke during use.                            |  |
| SECTION 9: Physical and chemical p                                | roperties  |
| 9.1. Information on basic physical and ch                         | emical properties  |
| Physical state  | : Solid  |
| Appearance  | : Damp granular mixture.   |
| Color   | : Black  |
| Odor  | : earthy   |
| Odor threshold  | : No data available  |
| pH  | : No data available  |
| Melting point   | : > 1100 °C  |
| Freezing point  | : No data available  |
| Boiling point   | : No data available  |
|   | : No data available  |
| Flash point   |  |
| 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  | : ≈1.8   |
| Solubility  | : Slightly soluble in water.   |
| Partition coefficient n-octanol/water (Log Pow)                   | : No data available<br>: No data available   |

Auto-ignition temperature

Explosion limits

Explosive properties Oxidizing properties

Decomposition temperature Viscosity, kinematic Viscosity, dynamic

**9.2. Other information** No additional information available No data available

No data available

No data available

No data available

No data available

No data available

Not Applicable

:

:

:

·

:

•

### 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                               |  |
| None known.                                    |  |
| 10.2. Chemical stability                       |  |
| Stable under normal conditions.                |  |
| 10.3. Possibility of hazardous reactions       |  |
| Not established.                               |  |
| 10.4. Conditions to avoid                      |  |
| Avoid dust formation.                          |  |
| 10.5. Incompatible materials                   |  |
| No additional information available            |  |
| 10.6. Hazardous decomposition products         |  |
| No additional information available            |  |
| SECTION 11: Toxicological information          |  |
| 11.1. Information on toxicological effects     |  |
| Acute toxicity (oral)                          | Not classified   |
| Acute toxicity (dermal)                        | Not classified   |
| ·····  | Not classified   |
| graphite (7782-42-5)                           |  |
| LD50 oral rat                                  | > 2000 mg/kg (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female,<br>Experimental value, Oral)                  |
| LC50 Inhalation - Rat                          | > 2000 mg/m <sup>3</sup> air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust)) |
| Skin corrosion/irritation                      | Causes skin irritation.  |
| cristobalite (14464-46-1)                      |  |
| рН   | 6 - 7  |
| graphite (7782-42-5)                           |  |
| рН   | 7 (1.3 %)  |
| quartz (14808-60-7)                            |  |
| рН   | 6 - 7  |
|  | Causes eye irritation.   |
| cristobalite (14464-46-1)                      |  |
| pH   | 6-7  |
|  |  |
| graphite (7782-42-5)                           | 7 (4 2 0/)   |
| pH   | 7 (1.3 %)  |
| quartz (14808-60-7)                            |  |
| рН   | 6 - 7  |
|  | 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<br>STOT-repeated exposure | Not classified   |
| Aspiration hazard                              | Not classified   |
| Viscosity, kinematic                           | Not Applicable   |
| Likely routes of exposure                      | Inhalation.  |
|  |  |

### Safety Data Sheet

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

| Potential Adverse human health effects and  | : Based on available data, the classification criteria are not met.  |  |  |  |
|---|--|--|--|--|
| symptoms<br>Symptoms/effects after inhalation   | : May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure   |  |  |  |
| Symptoms/effects after skin contact   | through inhalation.<br>: Causes skin irritation.   |  |  |  |
| Symptoms/effects after eye contact  | Causes skin irritation.  |  |  |  |
| SECTION 12: Ecological information  |  |  |  |  |
| 12.1. Toxicity  |  |  |  |  |
| graphite (7782-42-5)  |  |  |  |  |
| LC50 - Fish [1]   | > 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water,  |  |  |  |
| EC50 - Crustacea [1]  | Experimental value, Lethal)<br>> 100 mg/I (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static<br>system, Fresh water, Experimental value, Behaviour) |  |  |  |
| EC50 72h - Algae [1]  | <ul> <li>&gt; 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static<br/>system, Fresh water, Experimental value, Growth rate)</li> </ul>   |  |  |  |
| EC50 72h - Algae [2]  | <ul> <li>&gt; 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static<br/>system, Fresh water, Experimental value, Cell numbers)</li> </ul>  |  |  |  |
| 12.2. Persistence and degradability   |  |  |  |  |
| P-7 Cement (Mixture)  |  |  |  |  |
| Persistence and degradability   | Not established.   |  |  |  |
| cristobalite (14464-46-1)   |  |  |  |  |
| Persistence and degradability   | Mineral. Not applicable.   |  |  |  |
| Chemical oxygen demand (COD)  | Not applicable   |  |  |  |
| ThOD<br>BOD (% of ThOD)   | Not applicable           Not applicable  |  |  |  |
| graphite (7782-42-5)  |  |  |  |  |
| Persistence and degradability   | Biodegradability: 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   |  |  |  |  |
| P-7 Cement (Mixture)  |  |  |  |  |
| Bioaccumulative potential   | Not established.   |  |  |  |
| cristobalite (14464-46-1)   |  |  |  |  |
| Bioaccumulative potential   | No data available.   |  |  |  |
| graphite (7782-42-5)  |  |  |  |  |
| Bioaccumulative potential   | Not bioaccumulative.   |  |  |  |
| 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   |  |  |  |  |
| 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<br>Ecology - waste materials   | <ul> <li>Dispose in a safe manner in accordance with local/national regulations.</li> <li>Avoid release to the environment.</li> </ul>   |  |  |  |
| SECTION 14: Transport information   |  |  |  |  |
| In accordance with DOT / TDG / IMDG / IATA<br>Department of Transportation (DOT)<br>In accordance with DOT<br>Not regulated |  |  |  |  |

Not regulated

#### Safety Data Sheet

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

| Transportation of Dangerous Goods<br>Not regulated<br>Transport by sea<br>Not regulated<br>Air transport<br>Not regulated |  |
|---|--|
| SECTION 15: Regulatory information  |  |
| 15.1. US Federal regulations  |  |
| All components of this product are present and listed a (TSCA) inventory  | s Active on the United States Environmental Protection Agency Toxic Substances Control Act   |
| 15.2. International regulations   |  |
| CANADA  |  |
| cristobalite (14464-46-1)   |  |
| Listed on the Canadian DSL (Domestic Substances Lis   | st)  |
|   |  |
| graphite (7782-42-5)  |  |
| Listed on the Canadian DSL (Domestic Substances Lis   | t)   |
| 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  |  |
| P-7 Cement (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 -        | 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                    |                     |                   |

| quartz (14808-60-7)                                      |  |   |   |                                     |  |
|--|--|---|---|-------------------------------------|--|
| 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  |                                     |  |

| Component                     | State or local regulations  |
|-------------------------------|---|
| Cristobalite (14464-46-1)     | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous<br>Substance List; U.S Pennsylvania - RTK (Right to Know) List |
| Graphite (7782-42-5)          | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous<br>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 |   |
| <b>o o</b> <i>i</i>           | o. 58 / Monday, March 26, 2012 / Rules and Regulations  |
| Revision date                 | : 3/26/2024   |
| 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.