

Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Date of issue: 01/14/2016 Supersedes: 12/01/2014 Version: 2.0

| SECTION 1: Identification of the sub | stance/mixture and of the company/undertaking |
|---|---|
| 1.1. Product identifier | |
| Product form Product name / Product code | Mixture Amerimix Mortar Type M, S & N Portland Cement Lime Sand (AMX 400) Amerimix Mortar Type S Fast Set Portland Cement Cement Lime Sand (AMX 400-S FS) Amerimix Water Repellent Mortar Type N & S Portland Cement Lime Sand (AMX 410) Amerimix Pointing Mortar (AMX 420) Amerimix Stone Veneer Mortar - Buff (AMX 470) Amerimix Polymer Modified Stone Veneer Mortar (AMX 475) Amerimix Mortar Type M, S & N Masonry Cement & Sand (AMX 500) Amerimix Water Repellent Mortar Type M, N & S Masonry Cement & Sand (AMX 510) Amerimix Coarse Grout - Core Fill (AMX 600 CG) Amerimix Fine Grout - Core Fill (AMX 600 FG) Amerimix Self Consolidating Coarse Grout (AMX 710 CG) Amerimix Stratch Brown & Finish Stucco (AMX 710 WMMR) Amerimix Premium Plus Stucco (AMX 715 Prem+ Stuc With & Without Fiber) Amerimix 2:1 Scratch Brown & Finish Stucco (AMX 760 2:1 SBF) |
| 1.2. Relevant identified uses of the subs | tance or mixture and uses advised against |
| | . Valious. |
| 1.3.Details of the supplier of the safety ofOldcastle Architectural Inc.900 Ashwood Parkway Suite 60030338 Atlanta, GA - USAT 800-334-0784 Tech Service: Monday - Friday; | 8:00am - 5:00pm EST |
| 1.4. Emergency telephone number | |
| Emergency number | : CHEMTREC (800) 424-9300 CHEMTREC International +1 (703) 527-3887 24 hr |
| SECTION 2: Hazards identification | |
| 2.1. Classification of the substance or m | ixture |
| GHS-US classification Acute toxicity 4 (Oral) Skin Irritation 2 Serious Eye Damage 1 Skin Sensitization 1 Carcinogenicity 1A Specific Target Organ Toxicity After Single Expos Specific Target Organ Toxicity After Repeated Exposed | sure 3 kposure 1 |
| 2.2. Label elements | |
| GHS-US labelling | |
| Hazard pictograms (GHS-US) | : GHS05 GHS07 GHS08 |
| Signal word (GHS-US) | : Danger |
| Hazard statements (GHS-US) | : Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. Causes damage to lungs through prolonged or repeated exposure |
| Precautionary statements (GHS-US) | Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust. If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/doctor if you feel unwell. Store locked up. Store in a well ventilated place. Keep container tightly closed. Dispose of contents and container in accordance with all local, regional, national and international regulations. |



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Other hazards 2.3

Other hazards not contributing to the classification : Not applicable.

Unknown acute toxicity (GHS-US) 2.4.

Amerimix 2:1 Scratch Brown & Finish Stucco (AMX 760 2:1 SBF): 20% of the mixture consists of ingredient(s) of unknown acute toxicity.

Amerimix Polymer Modified Stone Veneer Mortar (AMX 475): 19% of the mixture consists of ingredient(s) of unknown acute toxicity.

Amerimix Stone Veneer Mortar - Buff (AMX 470): 18% of the mixture consists of ingredient(s) of unknown acute toxicity.

Amerimix Scratch Brown & Finish Stucco (AMX 700 SBF): 17% of the mixture consists of ingredient(s) of unknown acute toxicity. Amerimix Water Mold Mildew Resistant Stucco (AMX 710 WMMR); Amerimix Premium Plus Stucco (AMX 715 Prem+Stuc W & WO Fiber); Amerimix Fine Grout - Core Fill (AMX 600 FG); Amerimix Water Repellent Mortar Type M, N & S Masonry Cement & Sand (AMX 510); Amerimix Mortar Type M, S & N Masonry Cement & Sand (AMX 500): 16% of the mixture consists of ingredient(s) of unknown acute toxicity.

Amerimix Water Repellent Mortar Type N & S Portland Cement Lime Sand (AMX 410): 14% of the mixture consists of ingredient(s) of unknown acute toxicity.

Amerimix Mortar Type M, S & N Portland Cement Lime Sand (AMX 400): 13% of the mixture consists of ingredient(s) of unknown acute toxicity.

Amerimix Coarse Grout - Core Fill (AMX 600 CG); Amerimix Self Consolidating Coarse Grout (AMX 610 CG); Amerimix Mortar Type S Fast Set Portland Cement Cement Lime Sand (AMX 400-S FS): 12% of the mixture consists of ingredient(s) of unknown acute toxicity.

Amerimix Pointing Mortar (AMX 420): 10% of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

Mixture 3.2.

SECTION 4: First aid measures

| Name | Product identifier | % | GHS-US classification |
|---|---|----------------------------|---|
| Quartz | (CAS No) 14808-60-7 | 60 - 100 | Acute Tox. 4 (Oral), H302 Carc. 1A, H350 STOT RE 1, H372 |
| Cement, portland, chemicals | (CAS No) 65997-15-1 | 10 - 35 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 |
| Calcium magnesium hydroxide (CaMg(OH)4) | (CAS No) 39445-23-3 | 2.5 - 7 | Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 |
| Calcium magnesium hydroxide oxide (CaMg(OH)2O) | (CAS No) 58398-71-3 | 2.5 - 7 | Not classified |
| Calcium hydroxide | (CAS No) 1305-62-0 | 1 - 5 | Skin Corr. 1B, H314 Eye Dam. 1, H318 |
| Limestone | (CAS No) 1317-65-3 | 0.5 - 2 | Not classified |
| Calcium oxide | (CAS No) 1305-78-8 | 0.5 - 2 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 |
| Calcium sulfate | (CAS No) 7778-18-9 | 0.5 - 2 | Not classified |
| Gypsum (Ca(SO4).2H2O) | (CAS No) 13397-24-5 | 0.5 - 2 | Not classified |
| The exact percentage (concentration) of composition has bee | n withheld as a trade secret in accorda | ance with paragraph (i) of | §1910.1200. |

Description of first aid measures 4.1. : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for First-aid measures after inhalation breathing. Get medical advice/attention if you feel unwell. First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to First-aid measures after eye contact do, remove contact lenses, if worn. Get medical attention immediately First-aid measures after ingestion If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor/physician.

| 4.2. Most important symptoms and effec | s, both acute and delayed |
|--|---|
| Symptoms/injuries after inhalation | : May cause respiratory tract irritation. |
| Symptoms/injuries after skin contact | : Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitisation by skin contact. |
| Symptoms/injuries after eye contact | : Causes serious eye damage. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. |
| Symptoms/injuries after ingestion | : Harmful if swallowed. May cause stomach distress, nausea or vomiting. |
| 4.3. Indication of any immediate medical | attention and special treatment needed |

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).



Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

| SECTI | ON 5: Firefighting measures | | | |
|-----------|--------------------------------------|--|--|--|
| 5.1. | Extinguishing media | | | |
| Suitable | extinguishing media | Treat for surrounding material. | | |
| Unsuitab | le extinguishing media | : Not available. | | |
| 5.2. | Special hazards arising from the sub | ostance or mixture | | |
| Fire haz | ard | : Products of combustion may include, and are not limited to: oxides of carbon. | | |
| 5.3. | Advice for firefighters | | | |
| Firefight | ng instructions | : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). | | |
| SECTI | ON 6: Accidental release meas | sures | | |
| 6.1. | Personal precautions, protective equ | Jipment and emergency procedures | | |
| General | measures | : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. | | |
| 6.2. | Methods and material for containme | nt and cleaning up | | |
| For cont | ainment | : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). | | |
| Methods | for cleaning up | : Vacuum or sweep material and place in a disposal container. | | |
| 6.3. | Reference to other sections | | | |
| No oddit | ional information available. | | | |

| SECTIO | ON 7: Handling and storage | | |
|------------|---------------------------------------|------|---|
| 7.1. | Precautions for safe handling | | |
| Precautio | ns for safe handling | : | Avoid contact with skin and eyes. Avoid generating and breathing dust. Do not swallow. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handle and open container with care. When using do not eat, drink or smoke. |
| Hygiene i | neasures | : | Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking. |
| 7.2. | Conditions for safe storage, includin | ng a | any incompatibilities |
| Storage of | conditions | : | Keep out of the reach of children. Store in dust-tight, dry, labelled containers. Keep container tightly closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers. |

Specific end use(s) 7.3.

No additional information available.

SECTION 8: Exposure controls/personal protection

Control parameters 8.1.

| Quartz (14808-60-7) | | | |
|-----------------------------|-------------------------------------|---|--|
| USA ACGIH | ACGIH TWA (mg/m³) | 0.025 mg/m³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | (30)/(%SiO2 + 2) mg/m ³ TWA, total dust (250)/(%SiO2 + 5) mppcf TWA, respirable fraction (10)/(%SiO2 + 2) mg/m ³ TWA, respirable fraction | |
| Cement, portland, chemicals | s (65997-15-1) | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 1 mg/m ³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 5 mg/m ³ | |
| | | | |
| Calcium oxide (1305-78-8) | | | |
| USA ACGIH | ACGIH TWA (mg/m³) | 2 mg/m ³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 5 mg/m³ | |
| | • | | |
| Calcium hydroxide (1305-62 | -0) | | |
| USA ACGIH | ACGIH TWA (mg/m³) | 5 mg/m³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 5 mg/m³ | |
| | | | |
| Calcium sulfate (7778-18-9) | | | |
| USA ACGIH | ACGIH TWA (mg/m³) | 10 mg/m³ | |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 5 mg/m³ | |



Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

| Limestone (1317-65-3) | | | | |
|----------------------------------|---------------|---|--|--|
| USA ACGIH | ACGIH TWA (mg | /m³) | 10 mg/m³ | |
| USA OSHA | OSHA PEL (TWA | .) (mg/m³) | 5 mg/m ³ | |
| | | | | |
| Gypsum (Ca(SO4).2H2O) (13 | 397-24-5) | | | |
| USA ACGIH | ACGIH TWA (mg | /m³) | 10 mg/m³ | |
| USA OSHA | OSHA PEL (TWA | .) (mg/m³) | 5 mg/m³ | |
| 8.2. Exposure controls | | | | |
| Appropriate engineering controls | s : | Use ventilation adequate to keep export recommended exposure limits. | osures (airborne levels of dust, fume, vapor, etc.) below | |
| Hand protection | : | Wear suitable waterproof gloves. | | |
| Eye protection | : | Wear approved eye protection (prope face protection (face shield). | rly fitted dust- or splash-proof chemical safety goggles) and | |
| Skin and body protection | : | Wear suitable waterproof protective c | lothing. | |
| Respiratory protection | : | A NIOSH approved dust mask or filterin when permissible exposure limits may b under the direction of a trained health ar respirator standard (29 CFR 1910.134) | g facepiece is recommended in poorly ventilated areas or e exceeded. Respirators should be selected by and used nd safety professional following requirements found in OSHA's and ANSI's standard for respiratory protection (Z88.2). | |
| Other information | : | Handle according to established indus drink where material is handled, proce smoking. | strial hygiene and safety practices. Do not eat, smoke or essed or stored. Wash hands carefully before eating or | |

| SECTION 9: Physical and chemical | properties | | | |
|--|---|--|--|--|
| 3.1. Information on basic physical and chemical properties | | | | |
| Physical state | : Solid. | | | |
| Appearance | : Powder. | | | |
| Colour | : Various. | | | |
| Odour | : Characteristic. | | | |
| Odour threshold | : No data available. | | | |
| рН | : 12 - 13 | | | |
| Relative evaporation rate (butylacetate=1) | : No data available. | | | |
| Melting point | : No data available. | | | |
| Freezing point | : No data available. | | | |
| Boiling point | : No data available. | | | |
| Flash point | : No data available. | | | |
| Self ignition temperature | : No data available. | | | |
| Decomposition temperature | : No data available. | | | |
| Flammability (solid, gas) | : Not Flammable. | | | |
| Vapour pressure | : No data available. | | | |
| Relative vapour density at 20 °C | : No data available. | | | |
| Relative density | : No data available. | | | |
| Solubility | : No data available. | | | |
| Log Pow | : No data available. | | | |
| Log Kow | : No data available. | | | |
| Viscosity, kinematic | : No data available. | | | |
| Viscosity, dynamic | : No data available. | | | |
| Explosive properties | : No data available. | | | |
| Oxidising properties | : No data available. | | | |
| Explosive limits | : No data available. | | | |
| 9.2. Other information | | | | |
| VOC content | : 0%, Not applicable; 0 wt, Not applicable. | | | |

SECTION 10: Stability and reactivity

Reactivity 10.1.

No dangerous reaction known under conditions of normal use.

10.2. **Chemical stability**

Stable under normal storage conditions. Keep dry in storage.

EN (English)



Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

| 10.3. Possibility of hazardous reactions | | |
|--|--|--|
| No dangerous reaction known under conditions of | normal use. | |
| 10.4. Conditions to avoid | | |
| Incompatible materials. Moisture. | | |
| 10.5. Incompatible materials | | |
| Wet cement is alkaline and incompatible with acid | ammonium salts and aluminum metal. | |
| 10.6. Hazardous decomposition products | | |
| May include, and are not limited to: oxides of carbo | on. | |
| SECTION 11: Toxicological information | on | |
| 11.1. Information on toxicological effects | | |
| Acute toxicity | : Harmful if swallowed. | |
| Quartz (14808-60-7) | | |
| LD50 oral rat | 500 mg/kg | |
| Calcium oxide (1305-78-8) | | |
| LD50 oral rat | 500 mg/kg | |
| Calcium hydroxide (1305-62-0) | | |
| LD50 oral rat | 7340 mg/kg | |
| Calcium sulfate (7778-18-9) | | |
| LD50 oral rat | > 3000 mg/kg | |
| | | |
| AMX Series 400, 500, 600, 700 | | |
| ATE (oral) | 530.2 mg/kg - 653.8 mg/kg, rat | |
| ATE (dermal) | No data available. | |
| ATE (Inhalation) | No data available. | |
| Skin corrosion/irritation | Causes skin irritation. | |
| Serious eye damage/irritation | : Causes serious eye damage. | |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction. | |
| | Based on available data, the classification criteria are not met. | |
| Carcinogenicity | May cause cancer. | |
| Quartz (14808-60-7) | | |
| IARC group | 1 | |
| National Toxicity Program (NTP) Status | 2 | |
| Reproductive toxicity | Based on available data, the classification criteria are not met. | |
| Specific target organ toxicity (single exposure) | : May cause respiratory irritation. | |
| Specific target organ toxicity (repeated exposure) | : Causes damage to organs through prolonged or repeated exposure. (Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.) | |
| Aspiration hazard | : Based on available data, the classification criteria are not met. | |
| Symptoms/injuries after inhalation | May cause respiratory tract irritation. | |
| Symptoms/injuries after skin contact | : Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitisation by skin contact. | |
| Symptoms/injuries after eye contact | : Causes serious eye damage. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. | |
| Symptoms/injuries after ingestion | : Harmful if swallowed. May cause stomach distress, nausea or vomiting. | |
| Other information | : Likely routes of exposure: ingestion, inhalation, skin and eye. | |
| SECTION 12: Ecological information | | |

12.1. Toxicity

Ecology - general

01/14/2016

EN (English)



: No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

| 12.2. Persistence and degradability | |
|---|---|
| AMX Series 400, 500, 600, 700 | |
| Persistence and degradability | No data available. |
| 12.3. Bioaccumulative potential | |
| AMX Series 400, 500, 600, 700 | |
| Bioaccumulative potential | No data available. |
| 12.4. Mobility in soil | |
| AMX Series 400, 500, 600, 700 | |
| Ecology - soil | No data available. |
| 12.5. Other adverse effects | |
| Other adverse effects | No data available. |
| SECTION 13: Disposal considerations | 3 |
| 13.1. Waste treatment methods | |
| Waste disposal recommendations | : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. |
| SECTION 14: Transport information | |
| In accordance with DOT: | |
| 14.1. UN number | |
| Not applicable. | |
| 14.2. UN proper shipping name | |
| Not applicable. | |
| 14.3. Additional information | |
| Other information | No supplementary information available. |
| SECTION 15: Regulatory information | |
| 15.1. US Federal regulations | |
| Quartz (14808-60-7) | |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| Cement, portland, chemicals (65997-15-1) | |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| Calcium oxide (1305-78-8) | |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| Calcium magnesium hydroxide (CaMg(OH)4) | (39445-23-3) |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| Calcium magnesium hydroxide oxide (CaMg(| OH)2O) (58398-71-3) |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| Calcium hydroxide (1305-62-0) | |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| Calcium sulfate (7778-18-9) | |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| Limestone (1317-65-3) | |
| Listed on the United States TSCA (Toxic Substar | nces Control Act) inventory |
| 15.2. US State regulations | |
| AMX Series 400, 500, 600. 700 | |
| State or local regulations | This product contains Crystalline Silica, Quartz and may also contain other chemicals |
| | Known to the State of California to callee cancer, birth detects of other reproductive harm |



Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

| SECTION 16: Other information | | |
|-------------------------------|---|---|
| Data sources | : | SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. |
| NFPA health hazard | : | 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given. |
| NFPA fire hazard | : | 1 - Must be preheated before ignition can occur. |
| NFPA reactivity | : | 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product





MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

Identity: BASALITE MORTAR MIX TYPE S/M 80# and BULK PIGMENTED

Manufacturer's Name:

Basalite Concrete Products, LLC

605 Industrial Way Dixon, CA 95620 11888 West Linne Road Tracy, CA 95376

Information Telephone Number: (707) 678-7933

SECTION II - PRODUCT AND COMPONENT DATA

| <u>Composition</u> | | CAS Number | Percent | |
|--|--------------------------|--|--|------------------------|
| Cement | | 65997-15-1 | 20-30% | |
| Mortar Sand | | Mixture | 60-70% | |
| Lime | | Mixture | 0-5% | |
| Hydrocide | | Mixture | 0-1% | |
| Colorant | | Mixture | 0-2% | |
| EXPOSURE LIMITS: | | | | |
| <u>Composition</u> | CAS Number | ACGIH TLV | OSHA PEL | <u>IDLH</u> |
| *Crystalline Silica (Quartz) **Cement | 14808-60-7 65997-15-1 | *See Below 10 mg/m ³ (tot.) 5 mg/m ³ (resp.) | *See Below 15 mg/m ³ (tot.) 5 mg/m ³ (resp.) | 5000 mg/m ³ |

- * OSHA PEL for crystalline silica in the form of quartz is = 10 mg/m³ ÷ (% SiO₂+2), and 50% of this value for crystobalite and tridymite.
- ** Portland cements are listed by OSHA in 29 CFR 1010.1000, Table Z-1-A and require material safety data sheets (<u>FR</u>, January 19, 1989). MSHA (30 CFR 55.5.-1, Ref. 2), ACGIH (TLV's for 1973, Appendix E) and ACGIH (TLV's for 1984-5, Appendix D) list portland cements as nuisance dusts. Portland cements are <u>NOT</u> listed by NTP, IARC, or OSHA as carcinogens. However, since portland cement is manufactured from raw material mined from the earth (limestone, marl, sand, shale, clay, etc.) and process heat is provided by burning fossil fuels, trace, but detectable, amounts of naturally occurring, and possible harmful, elements may be found during chemical analysis. Under ASTM standards, portland cement may contain .75 percent insoluble residue. A fraction of these residues may be free crystalline silica.

SECTION III - HEALTH HAZARD and FIRST AID INFORMATION

CHRONIC HAZARDS:

Primary Route of Exposure: Inhalation

<u>Exposure Limits</u>: (Acceptable exposure levels for this product must be defined in the workplace due to the combination of silica and other constituents and condition of use.) Unless specified otherwise, limits are expressed as eight-hour Time-weighted averages (TWA). Limits for cristobalite and tridymite (other forms of cyrstalline silica) are equal to one-half of the limits for quartz.

<u>Particulates or Dust</u>: TLV - 10mg/m³ (total particulate) or $3mg/m^3$ (respirable particulate), not otherwise classified; OSHA PEL = 15 mg/m³ (total particulate, not otherwise regulated). OSHA PEL = 5 mg/m³ (respirable particulate, not otherwise regulated).

<u>Respirable Crystalline Silica (quartz)</u>: TLV = 0.1 mg/m³; OSHA PEL =10 mg/m³ ÷ (%SiO₂ +2); OSHA Proposed PEL 0.1 mg/m³

<u>Respirable Dust containing silica</u>: OSHA PEL = 10 mg/m³ ÷ (%SiO₂ + 2)

<u>Total Dust containing silica</u>: OSHA PEL = $30 \text{ mg/m}^3 \div (\% \text{SiO}_2 + 2)$

ACGIH and OSHA have determined that adverse effects are not likely to occur in the workplace provided exposure levels do not exceed the appropriate TLVs/PELs. However, because of the wide variation in individual susceptibility, lower exposure limits may be appropriate for some individuals, including persons with pre-existing medical conditions such as those described below.

Abbreviations: TLV = threshold limit value of the American Conference of Governmental Industrial Hygienists (ACGIH); OSHA PEL = permissible exposure limit of the Occupation Safety and Health Administration (OSHA); $mg/m^3 = milligrams$ of substance per cubic meter of air.

SUBCHRONIC AND CHRONIC HEALTH EFFECTS:

<u>Pulmonary Diseases</u>: Excessive exposure to particulates (dust) over an extended period of time may result in the development of silicosis and other pulmonary diseases.

Carcinogenicity: IARC has classified respirable crystalline silica (quartz), a known carcinogen in humans.

<u>California Proposition 65 Warning</u>: This product contains silica. Use of this product will expose you to respirable crystalline silica, which is "known in the State of California to cause cancer and to other substances which are known to the State of California to cause cancer, birth defects and other reproductive harm."

<u>See also</u>: American Society for testing and Materials (ASTM) Standard practice E1132-86, "Standard Practice for Health Requirements Relating to Occupational Exposure to Quartz Dust."

<u>Medical Conditions Aggravated by Exposure</u>: Excessive dust exposure may aggravate any existing respiratory disorders or diseases. Possible complications of allergies resulting in irritation to skin, eyes and respiratory passage may occur from excessive exposure to dusts.

ACUTE HAZARDS:

<u>Eye Contact:</u> Exposure to airborne dust may cause immediate or delayed irritation or inflammation. Eye contact by larger amount of dry powder or splashes of wet masonry cement may cause effects ranging from moderate eye irritation to chemical burns and blindness. Such exposure needs immediate medical attention

<u>Skin Contact</u>: Direct contact with dust may cause irritation by mechanical abrasion. Dry masonry cement contacting wet skin or exposure to mist or wet masonry cement may cause more severe skin effects including thickening, cracking, or fissuring of the skin. Prolonged exposure to wet masonry can cause severe skin damage in the form of caustic chemical burn

Skin Absorption: Not expected to be a significant exposure route.

<u>Ingestion</u>: Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage.

<u>Inhalation</u>: Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following exposures in excess of appropriate exposure limits. Use of natural sand and gravel for construction purposes is not believed to cause additional acute toxic effects. However, repeated overexposure to very high levels of respirable crystalline silica (quartz, cristobalite, tridymite) for periods as short as six months have caused acute silicosis. Acute silicosis is a rapidly progressive, incurable

lung disease that is typically fatal. Symptoms include (but are not limited to); shortness of breath, cough, fever, weight loss, and chest pain.

FIRST AID:

<u>Eyes</u>: Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops.

Skin: Wash with soap and water. Contact a physician if irritation persists or later develops.

<u>Ingestion</u>: If person is conscious, give large quantity of water and induce vomiting; however, never attempt to make an unconscious person drink or vomit. Get immediate medical attention.

<u>Inhalation</u>: Remove to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops.

SECTION IV - PHYSICAL/CHEMICAL CHARACTERISTICS

| Boiling Point: | NA | Specific Gravity ($H_2O = 1$): | 2.6 |
|--------------------------------|-----------------------------------|----------------------------------|-----|
| Vapor Pressure (mm Hg): | NA | Melting Point: | NA |
| Vapor Density (Air = 1): | NA | Evaporation Rate: | |
| Solubility in Water: | 0 | (Butyl Acetate = 1) | NA |
| Appearance and Odor: Vitrified | solid, essentially odorless, wide | range of colors | |

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): NA Extinguishing Media: NA Unusual Fire and Explosion Hazards: None Flammable Limits: NA LEL: NA UEL: NA Special Fire Fighting Procedures: None

SECTION VI - REACTIVITY DATA

Stability:Unstable:Stable:X Conditions to Avoid:NoneIncompatibility (Materials to Avoid):None knownHazardous Decomposition or Byproducts:None knownHazardous Polymerization:May Occur:Will Not Occur:XConditions to Avoid:None

SECTION VII - PERSONAL PROTECTION AND CONTROL MEASURES

RESPIRATORY PROTECTION: To minimize exposure to dust and/or crystalline silica, NIOSH/MSHA approved respirators must be worn in accordance with a respiratory protection program which meets OSHA requirements as set forth at 29 CFR 1910.134 and ANSI Z88.2-1080 "Practices for Respiratory Protection."

SKIN PROTECTION: Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

<u>EYE PROTECTION</u>: Use safety glasses with side shields. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated.

LOCAL EXHAUST: When using mortar mix and stucco, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section III. See ACGIH "Industrial Ventilation, A Manual of Recommended Practice," latest edition.

<u>SAFETY MEASURES</u>: Wear hard hats and/or steel-toed safety shoes if bags may fall from an elevation or be dropped during handling.

WORK/HYGIENIC PRACTICES: Avoid creating and breathing dust.

SECTION VIII - HANDLING AND STORAGE INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use adequate ventilation, dustless vacuum or cleanup systems for handling, storage, and clean-up so that airborne dust does not exceed the PEL. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean, and fit test respirators in accordance with OSHA standards. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing which has become dusty. See also control measures in Section VII.

WASTE DISPOSAL METHOD: This material is classed as a non-hazardous solid waste for disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: None for normal handling and storage of intact bags. This product is not intended or designed for use as an abrasive blasting medium or for foundry applications and should not be used for those purposes. Do not store near food and beverages or smoking materials.

<u>OTHER REGULATIONS</u>: Community Right-To-Know = this product is not subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) [40 CFR 370 and 372].

TRANSPORTATION: DOT Hazard Classification: Not Regulated Placard Required: None.

UN/NA Code: None Labeling Requirement: None.

SECTION IX - OTHER INFORMATION

The information and recommendations contained herein are based upon the data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful health effects which may be caused by exposure to airborne dust particles created by dry sawing of grinding of our products. Customers/users of mortar mix and stucco must comply with all applicable health and safety laws, regulations, and orders.

MSDS STATUS: Revision 5 PREPARER: Normita G. Callison, REM Revised By: Lance Vasquez Title: Director, Environmental Services Telephone No: (707) 678-7933



Safety Data Sheet (SDS)

| Product: | Adhered Masonr | y Stone Veneer (AMSV) | |
|--------------|----------------|-----------------------|------------|
| SDS No: | 010 | Preparation Date: | 05/31/2015 |
| Version No.: | 1.0 | Revision Date: | 12/07/2015 |

SECTION 1. IDENTIFICATION OF THE MIXTURE AND SUPPLIER

1.1 Product Identifier:

Product name: Product code: Formula: Adhered Masonry Stone Veneer Various Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against:

| Relevant identified uses: | Interior or Exterior Wall or Surface Covering |
|---------------------------|---|
| Uses advised against: | Any use other than those recommended |

1.3 Details of the supplier of the safety data sheet:

| Manufacturer/Supplier | Eldorado Stone |
|-----------------------------|-----------------------------------|
| Street Address | 1370 Grand Avenue, San Marcos, CA |
| Country ID/Postcode | USA/92078 |
| Customer service telephone: | 760-736-3232/ 800-925-1491 |

1.4 Emergency telephone number:
Emergency telephone number:
Hours available:877-347-8096
24 hours a day / 7 days a week

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

Adhered Masonry Stone Veneer (AMSV) are defined by OSHA as an article (under normal conditions, no more than minute or trace amounts of a hazardous chemicals are released and the article does not pose a physical hazard or health risk to employees).

An SDS not is required for articles; however, this SDS is provided to communicate hazards associated where activities related to the Adhered Masonry Stone Veneer (cutting, grinding, crushing, drilling or breaking) may result in the release of a hazardous substance in DUST.

GHS Classification(s) for Adhered Masonry Stone Veneer according to OSHA Hazard Communication Standard (29 CFR 1910.1200) under normal handling conditions:

None

Preparation Date: 05/31/2015 Revision Date: 12/07/2015

GHS Classification(s) for dust generated from cutting, grinding, crushing, drilling or breaking of Adhered Masonry Stone Veneer according to OSHA Hazard Communication Standard (29 CFR 1910.1200) under use conditions that may result in the release of hazardous substances:

Skin Corrosion/Irritation, Category 2 (H315) Eye Damage/Irritation, Category 2 (H319) Specific Target Organ Toxicity-Repeated Exposure (STOT-RE), Category 1 (H372)

Note: The ASMV dust classifications are based on (1) individual ingredient classifications (i.e., Silica Sand [SiO₂], pumice, expanded shale, expanded clay or expanded slate, Portland Cement, Fly Ash, etc.), (2) the final chemical composition of the AMSV (based on cement chemistry) and (3) the form of the material (dust). Further, the Specific Target Organ Toxicity-Repeat Exposure is a conservative classification based on the potential presence of respirable crystalline silica. Eldorado Stone has not performed analysis for the presence of respirable crystalline silica under these handling conditions.

Additional information:

For full text of GHS Hazard statements (H-statements) and associated Precautionary statements (P-statements), see below.

2.2 Label elements

The Hazard Pictograms, Signal Word and Precautionary Statements only apply to activities that may release hazardous substances from the AMSV (i.e., cutting / grinding / crushing / drilling / breaking).

No Hazard Pictograms, Signal Word or Precautionary Statements are applicable to the Adhered Masonry Stone Veneer.

Hazard Pictograms that apply to the dust generated from cutting, grinding, crushing, drilling or breaking of the Adhered Masonry Stone Veneer:

| Signal Word: | Danger |
|---|--|
| Hazard Statements: (For AMSV Dust Generated from Cutting, Grinding, Crushing, Drilling or Breaking) | H315: Causes skin irritation. H319: Causes eye irritation. H372: Causes damage to lungs through prolonged or repeated inhalation exposure. |
| Precautionary Statements: (For AMSV Dust Generated from Cutting, Grinding, Crushing, Drilling or Breaking) | P260: Do not breathe dust. P270: Do not eat, drink or smoke while using this product. P271: Use only outdoors or in a well-ventilated area. P264: Wash thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352: IF ON SKIN: Wash with plenty of water. P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

| Other | hazards | s related | P3 P3 P3 P3 P3 P3 P5 I to AMS | 14: Get m 21: See th 32 + P313 37 + 313: 62 + P36 reuse. 01: Dispo regional | nedical he SDS 3: If ski If eye 4: Take se of g / natior genera | advice/atte for specific n irritation c irritation pe off contam enerated du nal / interna ated from | ntion if you feel unwell. c treatment. occurs, get medical advice/attention. rsists, get medical attention. inated clothing and wash before ust in accordance with local / tional regulations. cutting, grinding, crushing, r |
|--------|----------|-----------|--|--|--|---|---|
| Listed | Carcinog | ens: | Silica o | dust (resp | irable, | crystalline f | raction) in the form of quartz. |
| IARC: | Yes | NTP: | Yes | OSHA: | No | Other: | No (European Union) |
| Hazard | ous Prop | erties: | Dust g may ca respira lungs t | enerated ause eye atory tract upon repe | from co damag . Resp eated in | utting, grind e and skin i irable crysta halation ex | ing, crushing, drilling or breaking rritation. May be irritating to alline silica may cause damage to posures. |

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Description of the mixture:

2.3

The product is a solid concrete block that, when subjected to cutting, grinding, crushing, drilling or breaking, may form hazardous dusts.

3.2 Hazardous Ingredients:

| Name | CAS No. | Weight % | GHS Classification per OSHA Hazard Communication (29 CFR 1900.1200) |
|-------------------------|-------------|----------|---|
| Silica dioxide (quartz) | 14808-60-7 | 0-90% | STOT-RE, Category 1 (H372)* |
| Portland Cement | 65597-15-1 | 8-15% | Skin Corrosion/Irritation, Category 2 (H315) Eye Damage/Irritation, Category 1 (H318) STOT-Single Exposure, Category 3 (H335) |
| Fly Ash | 68131-74-8 | 0-4% | STOT-RE, Category 1 (H372*) |
| Iron Oxide Pigments | 001309-37-1 | 0-1% | Not considered a hazardous ingredient. |

* The Specific Target Organ Toxicity-Repeat Exposure (STOT-RE) is a conservative classification based on the presence/potential presence of respirable crystalline silica.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

Inhalation:

If dust generated from cutting, grinding, crushing, drilling or breaking is inhaled, remove person to fresh air and keep comfortable for breathing. Get medical attention if respiratory symptoms persist.

| Skin contact: | If dust generated from cutting, grinding, crushing, drilling or breaking is on skin, wash with soap and water. Get medical advice/attention if irritation occurs/persists. |
|---------------|---|
| Eye contact: | If dust generated from cutting, grinding, crushing, drilling or breaking is in eyes, rinse cautiously with water for several minutes. Get medical advice/attention if irritation occurs/persists. |

Revision Date: 12/07/2015

Ingestion: No specific first aid measures are required.

4.2 Most important health effects related to AMSV dust generated from cutting, grinding, crushing, drilling or breaking, both acute and delayed:

- Acute effects: Direct exposure to dust generated from cutting, grinding, crushing, drilling or breaking may cause eye damage/irritation, skin irritation and respiratory irritation. Dust can dry and irritate the skin and cause dermatitis. Can irritate eyes and skin through mechanical abrasion.
- **Delayed effects:** Chronic exposure to inhaled dust generated from cutting, grinding, crushing, drilling or breaking may cause lung damage from repeated exposure. Chronic inhalation of dusts containing free crystalline silica may result in silicosis.
- 4.3 Indication of any immediate medical attention and special treatment needed:

Seek first aid or call a doctor if contact with dust generated from cutting, grinding, crushing, drilling or breaking with eyes occurs and irritation remains after rinsing.

SECTION 5. FIREFIGHTING MEASURES

5.1 **Extinguishing Media:**

Suitable extinguishing media: Product is not flammable. Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Not applicable; the product is not flammable.

5.2 Special hazards arising from the substance or mixture:

| Hazardous combustion | None known. |
|----------------------|-------------|
| products: | |

5.3 Advice for firefighters:

> Special protective equipment As with any fire, wear self-contained breathing apparatus, and precautions for firefighters: MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures associated with AMSV dust generated from cutting, grinding, crushing, drilling or breaking:

For Non-Emergency Personnel:

| Protective equipment: | In case of exposure to dust generated from cutting, grinding, crushing, drilling or breaking, wear specified protective equipment. (See Section 8). |
|---------------------------|--|
| Emergency procedures: | Avoid the creation of dust generated from cutting, grinding, crushing, drilling or breaking. Use scooping, water/flushing/misting or vacuum cleaning systems. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling dust. |
| For Emergency Responders: | |
| Protective equipment: | In case of exposure to dust generated from cutting, grinding, crushing, drilling or breaking, wear specified protective equipment. In case of fire, use self-contained breathing apparatus with full face mask. |

6.2 Environmental Precautions

Discard any product or dust residue in compliance with local regulations.

6.3 Methods and material for containment and cleaning up:

| For containment and cleaning up: | After cutting, grinding, crushing, drilling or breaking activities, use scooping, water spraying/flushing/misting or ventilated vacuum cleaning system to clean up dust generated from cutting, grinding, crushing, drilling or breaking. Use closed containers. Do not use pressurized air to clean dust. |
|----------------------------------|--|
| Other information: | Take measures to avoid dust formation during cutting, grinding, crushing, drilling or breaking activities. |

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

| Protective measures: | Avoid contact with dust generated from cutting, grinding, crushing, drilling or breaking with skin, eyes, and clothing. Avoid breathing dust. Wash thoroughly after handling. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling dust. |
|---|---|
| Measures to prevent fires: | Not applicable; material is non-flammable. |
| Measures to prevent dust generation: | Vacuum, scoop, or use water mist/spray/flush to remove generated dust during cutting, grinding, crushing, drilling or breaking activities. Do not use pressurized air. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling dust. |
| Measures to protect the environment: | Not applicable; material is not an environmental hazard. |

| Advice on general occupational hygiene: | Practice good housekeeping. Avoid formation of dust generated from cutting, grinding, crushing, drilling or breaking. Do not breathe |
|--|--|
| | dust. Use adequate exhaust ventilation, dust collection and/or water |
| | exposure limits. Respirable crystalline silica dust may be in the air |
| | without a visible dust cloud. In case of insufficient ventilation, wear |
| | a NIOSH approved respirator for silica dust when using, handling, |
| | storing or disposing dust from this product. Do not permit dust to |
| | collect on walls, floors, sills, ledges, machinery, or equipment. |
| | Maintain and test ventilation and dust collection equipment. Wash |
| | or vacuum clothing that has become dusty. Avoid eating, smoking, |
| | or drinking while handling the material. |

7.2 Conditions for safe storage, including any incompatibilities:

Storage conditions: Minimize dust produced during loading and unloading.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters applicable to AMSV dust generated from cutting, grinding, crushing, drilling or breaking:

| OCCUPATIONAL EXPOSURE LIMITS FOR HAZARDOUS SUBSTANCES IN THE WORKPLACE | | | | | |
|--|-------------------------------------|--|---|---|---|
| SUBSTANCE | | OSHA PEL TWA / STEL (mg/m ³) | NIOSH REL TWA / STEL (mg/m ³) | ACGIH TLV TWA / STEL (mg/m ³) | CAL - OSHA PEL (mg/m ³) |
| Calcium Oxide | | 5 | 2 | 2 | - |
| | Total Quartz | 30 ÷ (%SiO₂+2) (Total Quartz) | - | - | 0.3 |
| Crystalline Silica | Respirable Crystalline Silica | 10 ÷ (%SiO ₂ +2) | 0.05 | 0.025 (a-quartz & cristobalite) | 0.1 |
| | Cristobalite | - | 0.05 | 0.025 (a-quartz & cristobalite) | 0.05 (respirable) |
| Particulates Not | Total | 15 | 15 | - | 10 |
| Otherwise Regulated | Respirable | 5 | 5 | - | 5 |

United States

8.2 Exposure controls:

8.2.1. Exposure Controls

Engineering controls:

Ventilation should be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Use general and local exhaust ventilation and dust collection systems as necessary to minimize exposure to dust generated from cutting, grinding, crushing, drilling or breaking. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling dust.

8.2.2. Personal Protective Equipment

| Respiratory protection: | Wear a NIOSH/MSHA approved particulate respirator if exposure to dust generated from cutting, grinding, crushing, drilling or breaking is unavoidable and where occupational exposure limits may be exceeded. If airborne dust exposures exceed the PEL or TLV, a self-contained breathing apparatus or airline respirator is recommended. |
|------------------------------|---|
| Eye and face protection: | If eye contact with dust generated from cutting, grinding, crushing, drilling or breaking is anticipated, wear protective glasses with side shields. Avoid contact lenses. |
| Hand and skin protection: | Wear gloves and protective clothing to minimize skin contact with dust generated from cutting, grinding, crushing, drilling or breaking. Wash hands with soap and water after contact with material. |
| Foot protection: | Wear American National Standards Institute (ANSI) approved hard- toed safety shoes when handling AMSV. |

8.2.3. Environmental Exposure Controls

| Instructions to prevent | No special requirements. Discard any product or dust residue in |
|-------------------------|--|
| exposure: | compliance with local regulations. Wet methods of cutting, grinding, |
| | crushing, drilling or breaking are the preferred method of controlling |
| | dust. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

| Property | Value | Property | Value |
|---------------------------------|-----------------|--|----------------|
| Appearance: | Simulated Stone | Lower Explosive Limit (LEL): | Not applicable |
| Odor | Odorless | Vapor Pressure (Pa): | Not applicable |
| Odor threshold | Not applicable | Vapor Density: | Not applicable |
| pH (25°C): | Not available | Relative Density/Specific Gravity: | 1.4 – 1.6 |
| Melting/Freezing Point (°C): | Not applicable | Water Solubility: | Negligible |
| Initial Boiling Point (°C): | Not applicable | Partition Coefficient: <i>n-</i> octanol/water: | Not applicable |
| Boiling Range (°C): | Not applicable | Auto-ignition Temperature (°C): | Not applicable |
| Flash Point(°C): | Not applicable | Decomposition Temperature (°C): | Not available |
| Evaporation Rate: | Not applicable | Viscosity: | Not applicable |
| Flammability (solid, gas): | Not combustible | Explosive Properties: | Not applicable |

| Property | Value | Property | Value |
|---------------------------------|----------------|-----------------------|----------------|
| Upper Explosive Limit (UEL): | Not applicable | Oxidizing Properties: | Not applicable |

SECTION 10. STABILITY AND REACTIVITY

| 10.1 | Reactivity | Stable inert material |
|------|------------------------------------|-----------------------|
| 10.2 | Chemical stability | Stable inert material |
| 10.3 | Possibility of hazardous reactions | None known. |
| 10.4 | Conditions to avoid | None known |
| 10.5 | Incompatible materials | None known |
| 10.6 | Hazardous decomposition products | None known |

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

| Acute toxicity: | No data is available on the AMSV dust generated from cutting, grinding, crushing, drilling or breaking. No ingredients within the mixture exhibit acute toxicity. |
|-------------------------------------|--|
| Skin corrosion/irritation: | Contact with dust may cause skin irritation. |
| Serious eye damage / irritation: | Eye Irritant. Eye contact with dust generated from cutting, grinding, crushing, drilling or breaking may cause eye irritation. |
| Respiratory or skin sensitization: | No data is available on the AMSV dust generated from cutting, grinding, crushing, drilling or breaking. No ingredients exhibit sensitization effects. |
| Germ cell mutagenicity: | No data is available on the AMSV dust generated from cutting, grinding, crushing, drilling or breaking. No ingredients exhibit mutagenic effects. |
| Carcinogenicity: | No data is available on the AMSV dust generated from cutting, grinding, crushing, drilling or breaking. Crystalline silica (respirable) has been identified as a carcinogen by IARC and NTP. |
| Reproductive toxicity: | No data is available on the AMSV dust generated from cutting, grinding, crushing, drilling or breaking. No ingredients exhibit reproductive toxicity. |
| STOT single exposure: | No data is available on the AMSV dust generated from cutting, grinding, crushing or drilling. |

| STOT repeated exposure: | No data is available on the repeated inhalation of AMSV dust generated from cutting, grinding, crushing, drilling or breaking. Repeated inhalation of AMSV dust generated from cutting grinding, crushing or breaking may cause lung damage if respirable crystalline silica is present. Crystalline silica (respirable) has been shown to cause silicosis after repeated exposure. |
|-------------------------|--|
| Aspiration hazard: | Not applicable, the material is a not a liquid. |

SECTION 12. ECOLOGICAL INFORMATION

No data available on the AMSV dust generated from cutting, grinding, crushing, drilling or breaking.

SECTION 13. DISPOSAL CONSIDERATIONS

Considered a non-hazardous waste. Follow applicable federal, state and local regulations.

SECTION 14. TRANSPORT INFORMATION

Regulatory Entity

US DOT

Shipping Name Hazard Class ID Number Packing Group

Not regulated Not regulated Not regulated Not regulated

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations / legislation specific to the mixture:

United States Regulations

| Toxic Substances Control Act (TSCA) Inventory Status | All components of this product are listed on the TSCA Inventory or are exempt from listing. | |
|---|--|---|
| SARA (Section 311/312) | Reactive Hazard | No |
| | Pressure Hazard | No |
| | Fire Hazard | No |
| | Immediate/Acute Toxicity | No |
| | Delayed/Chronic Toxicity | Yes – respirable crystalline silica |
| SARA Section 313 Information: | This product does not contain 313 of the Emergency Plannin Act of 1986 (EPCRA). | any toxic chemicals listed under ng and Community Right-to-Know |
| Clean Air Act (CAA) | This product does not contain the CAA at concentrations greater than the CAA at concentrations greater than the transmission of transm | any toxic chemicals listed under eater than 0.1%. |
| | VOC Content (weight %). | 0 wt. % |

United States Regulations

| Volatile Organic Compounds (VOCs) | Remarks: | Estimated |
|--------------------------------------|----------------------|---|
| State Right-to-Know Status | California Prop. 65: | Crystalline Silica. |
| | Massachusetts: | Silica, Crystalline-Quartz; Calcium oxide; Calcium carbonate (Limestone); Portland cement; Iron oxide dust. |
| | New Jersey | Silica, Crystalline-Quartz; Calcium oxide; Calcium carbonate (Limestone); Cement, Portland, Chemicals; Iron oxide. |
| | Pennsylvania: | Quartz (silica dioxide); Calcium oxide; Calcium carbonate (Limestone); Cement, Portland, Chemicals; Iron oxide. |

Dispose of all waste product and containers in accordance with federal, state and local regulations.

SECTION 16. OTHER INFORMATION

16.1 Indication of changes:

Initial SDS prepared on 04-07-2015; Revised 12/07/2015

16.2 Abbreviations and acronyms:

| AMSV | Adhered Masonry Stone Veneer |
|-----------|---|
| ANSI: | American National Standards Institute |
| CAA: | Clean Air Act |
| Cal/OSHA: | California Department of Industrial Relations - Division of Occupational Safety and Health |
| CAS: | Chemical Abstract Service Registry Number |
| CFR: | Code of Federal Regulations |
| CWA: | Clean Water Act |
| GHS: | Globally Harmonized System of Classification and Labeling |
| HMIS: | Hazardous Materials Identification System |
| IARC: | International Agency for Research on Cancer |
| LEL: | Lower explosive limit |
| MSHA: | Mine Safety and Health Administration |
| NA: | Not Applicable |
| NIOSH: | National Institute of Occupational Safety and Health |
| NTP: | National Toxicology Program |
| OSHA: | Occupational Safety and Health Administration |
| Pa: | Pascal |
| PEL: | Permissible exposure limit |
| SARA: | Superfund Amendments and Reauthorization Act |
| SDS: | Safety data sheet |
| STEL: | Short-term exposure limit |
| STOT-RE: | Specific target organ toxicity-repeated exposure |

| Product: | Adhered Masonry Stone Veneer (AMSV) |
|--------------|-------------------------------------|
| SDS No: | 001 |
| Version No.: | 1.0 |

| STOT-SE: | Specific target organ toxicity-single exposure |
|----------|--|
| TLV: | Threshold limit value |
| TSCA: | Toxic Substances Control Act |
| TWA: | Time-weighted average |
| UEL: | Upper explosive limit |
| USA: | United States of America |
| US DOT: | United States of Department of Transportation |
| VOC: | Volatile organic compound |

16.3 Other hazards:

| Hazardous M | aterials Identification System (HMIS) | Degree of hazard: 0 = low, 4 = extreme |
|-------------|---------------------------------------|--|
| Health: 1* | Flammability: 0 | Reactivity: 0 |

* Dust generated from cutting, grinding, crushing, drilling or breaking activities may result in a chronic health hazard (Category 3 Health Hazard)

Personal Protection: B

Disclaimer:

This SDS has been prepared in accordance with the Hazard Communication Rule 29 CFR 1910.1200. Information herein is based on data considered to be accurate as of date prepared. No warranty or representation, express or implied, is made as to the accuracy or completeness of this data and safety information. No responsibility can be assumed for any damage or injury resulting from abnormal use, failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

- End of Safety Data Sheet (SDS) -

| Dec | 05 | 2017 | 10:13PM | HP | Fax |
|-----|----|------|---------|----|-----|
|-----|----|------|---------|----|-----|

page 21

| 21 | i al | : 1 | | |
|------|-------|-----|-----|--|
| 2.6 | | 14 | 112 | |
| 5. | | 1 | 1.4 | |
| 14. | Se | | 1. | |
| 12 | 1 | 3 | 15 | |
| 2 19 | 1.240 | 12 | | |
| | | | | |

10.64

Material Safety Data Sheet U.S. Department of Labor Occupational Safety and Health Administration May be used to comply with OSHA's Hazard Communication Standard (Non-Mandatory Form) 29 CFR 1910.1200. Standard must be Form Approved OMB No. 1218-0072 consulted for specific requirements. Note: Blank spaces are not permitted. If any item is not applicable, or no Type S Hydrated Lime Putty IDENTITY information is available, the space must be marked to indicate that. (Ca(OH)2 * Mg(OH)2) Section I **Emergency Telephone Number** Manufacturer's Name and Address Chemtrec 800-424-9300 Chemical Lime Company Information Phone Number **Date Prepared** 37244 Julen Street 3/30/2006 817-732-8164 Fort Worth, Texas 76107 Section II - Hazardous Ingredients/Identity Information **Other Limits** % (optional) **Hazardous** Components CAS **Common Name OSHA PEL** ACGIH TLV <40% 1305-62-0 Hydrated Lime 5 mg/m3 5 mg/m3 7340 mg/kg Calcium hydroxide Brucite N.A. N.A. <25% 1309-42-8 Magnesium hydroxide 10 mg/m3 10 mg/m3 <5% 1309-48-4 Periclase 6 mg/m3 Magnesium oxide 15 mg/m3 10 mg/m3 6450 mg/kg <3% Calcium carbonate 1317-65-3 Limestone <2% 4 mg/m3 14808-60-7 Quartz *see note below 0.025 mg/m3 Silicon dioxide *SiO2 OSHA PEL: 10 mg/m3 divided by (the percentage of silica in the dust plus 2) (respirable) Section III - Physical/Chemical Characteristics dec. 580 °C 100 °C 1.35 - 1.4 g/cc **Melting Point Specific Gravity Sound** Point N.A. Vapor Bressure (mm Hg) N.A. Vapor Density **Evaporation Rate** N.A. Material is a stable suspension of calcium magnesium hydroxide in water. pH=12.4@25°C Solubility in Water White high viscosity putty, odorless **Appearance and Odor** Section IV - Fire and Explosion Hazard Data LEL/UEL Flammable Limits **Extinguishing Media** Flash Point N.A. N.A. N.A. Not Combustible -- Use extinguishing agent for surrounding fire Special Firefighting Procedures/Unusual Fire and Explosion Hazards Avoid skin contact or inhalation of dust if material becomes dry. Section V - Reactivity Data Conditions to Avoid (stability - related) SQL bis Material is stable Incompatibility (Materials to Avoid) Acids:"Reacts vigorously and produces heat. Maleic Anhydride: May react explosively. Nitro Organic Compounds: May react to form explosive saits. Phosphorous: May form flammable products when heated. Aluminum: May react to form hydrogen gas. Hazardous Polymerization/Hazardous Decomposition of Byproducts Will not occur (none) Section VI - Health Hazard Data Inhalation. Ingestion Route(s) of Entry: Health Hazards (Acute and Chronic) Avoid skin and eye contact as irritation will occur. Contact lenses should not be worn when working with lime products. Inhalation can cause coughing, sneezing, or breathing problems. in the micity: NTP/IARC Monographs? SiO SiO₂ OSHA? spirable crystalline silica from occupational sources is classified by IARC as a Group I Carcinogen. California Proposition 65: Sillca is on the Governor's Proposition 65 list. Components used in this product may contain trace amounts of inherent naturally occurring elements (such as, but not limited to arsenic, cadmium)

that are on the Governor's Proposition 65 list.

| · · · | | | | |
|---|------------------------|--|--|----------------------------------|
| Chemical Lime Company | | Type S Putty MSDS | | page 2/2 |
| Section VI - Health Haza | rd Data (continu | ed) | | |
| Signs and Symptoms of Expos | urð - | | | |
| Skin or eye irritation; coug | hing or breathing | problems. | | |
| Medical Conditions Generally | Aggravated by Expos | ure | | |
| fory problems, ast | hma, dermatitis o | r skin or eye sensitivi | ty. | |
| Englishing and First Aid Proce | edure | A | | |
| Flush contaminated area | with excess water | If eye contact, rins | e eye with eye | wash solution or excess water |
| and seek medical attention | n immediately. | | | |
| Section VII - Precautions | s for Safe Handli | ng and Use | | |
| Steps to be Taken in Case Mate | erial is Released or S | pilled | | |
| Protect skin and eyes from | n contact and avo | annalation of mist. | Collect using s | hovels or other suitable methods |
| and place in steel drums. | Keep away from | acids or organic mat | erials. | |
| Waste Disposal Method | | | | |
| Carefully add water and fi | ush to sewer. Co | insult local, state, or f | lederal regulation | ons. |
| Precautions to be Taken in Ha | ndling and Storage | | | |
| Store in tightly closed con | itainers and keep | dry and away from a | cids or other inc | compatible substances. |
| An advetore or ship in alu | minum containers | S | ······································ | |
| and Precautions | | | | |
| Avoid, eye contact and bre | eathing dust if ma | terial becomes dry. | | |
| NFPA Rating: | HEALTH: 1 | FLAMMABILITY: | 0 | REACTIVITY: 0 |
| HMIS Rating: | HEALTH: 1 | FLAMMABILITY: | 0 | REACTIVITY: 0 |
| WHMIS Rating: | D2A, E | | | |
| Section VIII - Control Me | asures | | | |
| Respiratory Protection (Specified) | у Туре) | | | |
| Dust masks meeting the I | NIOSH N95 rating | are sufficient for cas | sual exposure to | p mist or dust. (42 CFR) |
| Ventilation Local Exhaust | | | Special | Do not dispose of dust with |
| N.A. | | | | combustible materials. |
| Mechanical (G | eneral) | | Other | |
| N.A. | | | L | |
| Cloves | | Other Protective Clothin | g or Equipment | |
| steen gloves | 9 | Full clothing to cover | r arms and legs | , satety glasses or face shield. |
| Work/Hygienic Practices | Non about the second | | | |
| Eye wash and shower sta | ition should be re | adily available. | | |

page 22

Chemical Lime Company provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person. Individuals receiving this information must consult their own technical and legal advisors and/ or exercise their own judgment in determining its appropriateness for a particular purpose. Chemical Lime Company makes no representations or warranties, either express or implied, including without limitation and warranties of merchantability or fitness for a particular purpose with respect to the information set forth herein in the product(s) to which the information refers. Accordingly, Chemical Lime Company will not be responsible or information and claims, losses or damages resulting from the use of or reliance upon or failure to use this information.

References: Sax, N.I. & R.J. Lewis Sr. (1989) "Dangerous Properties of Industrial Materials", New York: Van Nostrand Reinhold Co. Ltd. Lewis, R.J. (1997) "Hazardous Chemicals Desk Reference", New York: Van Nostrand Reinhold Co. Ltd. KSA



MATERIAL SAFETY DATA SHEET

Date Revised: 03/04/2002

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

Identity: **CONCRETE BLOCK**

Manufacturer's Name:

Basalite-Selma 1201 Golden State Blvd. Selma, Ca 93662

Emergency Telephone Number (702) 882-9336 and (209) 833 - 3670 **Telephone Number for Information** (559) 896-0753

SECTION IIA - PRODUCT AND COMPONENT DATA

| Composition | CAS Number | Percent | |
|------------------|------------|---------|--|
| Conc. Sand | Mixture | 40-50% | |
| Pumice | Mixture | 20-30% | |
| Natural Sand | Mixture | 10-15% | |
| Cement | Mixture | 10-15% | |
| EXPOSURE LIMITS: | | | |

| Composition | CAS Number | ACGIH TLV | OSHA PEL |
|-----------------------------|------------|-----------------------|-----------------------|
| Crystalline Silica (Quartz) | 14808-60-7 | See Below | See Below |
| Barium | 513-77-9 | 0.5 mg/m ³ | 0.5 mg/m ³ |

OSHA PEL for crystalline silica in the form of guartz is = $10 \text{ mg/m}^3 \div (\% \text{ SiO}_2+2)$, and 50% of this value for crystobalite and tridymite.

SECTION III - HEALTH HAZARD and FIRST AID INFORMATION

CHRONIC HAZARDS:

Primary Route of Exposure: Inhalation

Exposure Limits: (Acceptable exposure levels for this product must be defined in the workplace due to the combination of silica and other constituents and condition of use.) Unless specified otherwise, limits are expressed as eight-hour Timeweighted averages (TWA). Limits for cristobalite and tridymite (other forms of cyrstalline silica) are equal to one-half of the limits for quartz.

Particulates or Dust: TLV - 10mg/m³ (total particulate) or 3mg/m³ (respirable particulate), not otherwise classified; OSHA PEL.= 15 mg/m³ (total particulate, not otherwise regulated). OSHA PEL = 5 mg/m³ (respirable particulate, not otherwise regulated).

Respirable Crystalline Silica (quartz): TLV = 0.1 mg/m³; OSHA PEL =10 mg/m³ ÷ (%SiO₂ +2); OSHA Proposed PEL 0.1 mg/m³

Respirable Dust containing silica: OSHA PEL = 10 mg/m³ \div (%SiO₂ + 2)

<u>Total Dust containing silica</u>: OSHA PEL = $30 \text{ mg/m}^3 \div (\% \text{SiO}_2 + 2)$

ACGIH and OSHA have determined that adverse effects are not likely to occur in the workplace provided exposure levels do not exceed the appropriate TLVs/PELs. However, because of the wide variation in individual susceptibility, lower exposure limits may be appropriate for some individuals, including persons with pre-existing medical conditions such as those described below.

Abbreviations: TLV = threshold limit value of the American Conference of Governmental Industrial Hygienists (ACGIH); OSHA PEL = permissible exposure limit of the Occupation Safety and Health Administration (OSHA); $mg/m^3 = milligrams$ of substance per cubic meter of air.

SUBCHRONIC AND CHRONIC HEALTH EFFECTS:

<u>Pulmonary Diseases</u>: Excessive exposure to particulates (dust) over an extended period of time may result in the development of silicosis and other pulmonary diseases.

Carcinogenicity: IARC has classified respirable crystalline silica (quartz) a known carcinogen in humans.

<u>California Proposition 65 Warning</u>: Dry cutting, sanding or grinding of concrete block products will expose you to respirable crystalline silica which is "known in the State of California to cause cancer and to other substances which are known to the State of California to cause cancer, birth defects and other reproductive harm."

<u>See also</u>: American Society for testing and Materials (ASTM) Standard practice E1132-86, "Standard Practice for Health Requirements Relating to Occupational Exposure to Quartz Dust."

<u>Medical Conditions Aggravated by Exposure</u>: Excessive dust exposure may aggravate any existing respiratory disorders or diseases. Possible complications of allergies resulting in irritation to skin, eyes and respiratory passage may occur from excessive exposure to dusts.

ACUTE HAZARDS:

Eye Contact: Direct contact with dust may cause irritation by mechanical abrasion.

Skin Contact: Direct contact may cause irritation by mechanical abrasion.

Skin Absorption: Not expected to be a significant exposure route.

Ingestion: Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage.

<u>Inhalation</u>: Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following exposures in excess of appropriate exposure limits. Use of natural sand and gravel for construction purposes is not believed to cause additional acute toxic effects. However, repeated overexposure to very high levels of respirable crystalline silica (quartz, cristobalite, tridymite) for periods as short as six months have caused acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include (but are not limited to); shortness of breath, cough, fever, weight loss, and chest pain.

FIRST AID:

<u>Eyes</u>: Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do no attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops.

Skin: Wash with soap and water. Contact a physician if irritation persists or later develops.

<u>Ingestion</u>: If person is conscious, give large quantity of water and induce vomiting; however, never attempt to make an unconscious person drink or vomit. Get immediate medical attention.

Inhalation: Remove to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician of irritation persists or later develops.

SECTION IV - PHYSICAL/CHEMICAL CHARACTERISTICS

| Boiling Point: | NA | Specific Gravity ($H_2O = 1$): | 2.6 |
|--------------------------------|--------------------------------------|----------------------------------|-----|
| Vapor Pressure (mm Hg): | NA | Melting Point: | NA |
| Vapor Density (Air = 1): NA | | Evaporation Rate: | |
| Solubility in Water: | 0 | (Butyl Acetate = 1) | NA |
| Appearance and Odor: Vitrified | solid, essentially odorless, wide ra | nge of colors | |

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): NA Extinguishing Media: NA Unusual Fire and Explosion Hazards: None Flammable Limits: NA LEL: NA UEL: NA Special Fire Fighting Procedures: None

SECTION VI - REACTIVITY DATA

Stability:Unstable:Stable:XConditions to Avoid:NoneIncompatibility (Materials to Avoid):None knownHazardous Decomposition or Byproducts:None knownHazardous Polymerization:May Occur:Will Not Occur:X Conditions to Avoid:

SECTION VII - PERSONAL PROTECTION AND CONTROL MEASURES

RESPIRATORY PROTECTION: To minimize exposure to dust and/or crystalline silica, cutting or grinding concrete block products should be conducted with a wet saw/grinder and with sufficient ventilation. When such controls are not feasible, NIOSH/MSHA approved respirators must be worn in accordance with a respiratory protection program which meets OSHA requirements as set forth at 29 CFR 1910.134 and ANSI Z88.2-1080 "Practices for Respiratory Protection."

SKIN PROTECTION: Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

<u>EYE PROTECTION</u>: Use safety glasses with side shields. Face shields should also be used when dry sawing roof tile. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated.

LOCAL EXHAUST: When dry sawing or grinding clay roof tile, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section III. See ACGIH "Industrial Ventilation, A Manual of Recommended Practice," latest edition.

<u>SAFETY MEASURES</u>: Wear hard hats and/or steel-toed safety shoes if blocks may fall from an elevation or be dropped during handling.

WORK/HYGIENIC PRACTICES: Avoid creating and breathing dust.

<u>OTHER CONTROL MEASURES</u>: Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by feasible engineering controls, including (but not limited to) wet sanding, wet suppression, ventilation, and process enclosures. Respirators must be worn when such controls are not feasible or do not completely control dust generation.

SECTION VIII - HANDLING AND STORAGE INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use adequate ventilation dustless vacuum or cleanup systems for handling, storage, and clean-up so that airborne dust does not exceed the PEL. Use adequate ventilation and dust equipment. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges,

machinery, or equipment. Maintain, clean, and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing which has become dusty. See also control measures in Section VII.

WASTE DISPOSAL METHOD: This material is classed as a non-hazardous solid waste for disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: None for normal handling and storage of intact blocks. This product is not intended or designed for use as an abrasive blasting medium or for foundry applications and should not be used for those purposes. Do not store near food and beverages or smoking materials.

<u>OTHER REGULATIONS</u>: Community Right To Know = this product is not subject to the reporting requirements of Title III of SARA, 1986, and 40 CFR 372.

TRANSPORTATION: DOT Hazard Classification: Not Regulated UN/NA Code: None Placard Required: None. Labeling Requirement: None.

SECTION IX - OTHER INFORMATION

The information and recommendations contained herein are based upon the data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful health effects, which may be caused by exposure to airborne dust particles created by dry sawing of grinding of our products. Customers/users of concrete block products must comply with all applicable health and safety laws, regulations, and orders.

MSDS STATUS: Revision 3 PREPARER: Normita G. Callison,REM Title: Environmental Manager Telephone No: (916) 339 -8127



SAFETY DATA SHEET

Read the entire Safety Data Sheet for thorough evaluation.

| SECTION: 1 Ider | ntification | |
|---|--|--|
| E-Z Mix Inc. 11374 Tuxford St. Sun Valley, CA 91352 | Emergency Telephone Number (818) 767-8576 Information Telephone Number (818) 768-0568 | SDS#M001 Prepared: 05-2015 Revision: A |
| Material Name: | SPEC MIX [®] Masonry Mortars Type S - M - N, SPEC MIX [®] Stone Ver Stone Veneer Mortar (SVM 300), SPEC MIX [®] IWR Masonry Morta (Scratch & Brown), PMP Deck Mud, PMP Wall Mud, PMP Thin-Set | neer Mortar (SVM), SPEC MIX® ar Type S – M – N, SPEC MIX® Stucco t Mortar. |
| Product Use: | Mortars for construction with block, brick, veneer stones, etc. | |

SECTION: 2 Hazard Identification

Hazard-determining components of labeling: Silica, Portland cement Carcinogen – Category 1A Skin Corrosion – Category 1B Skin Sensitization – Category 1B Specific Target Organ Toxicity Repeat Exposure – Category 1 Specific Target Organ Toxicity: Single Exposure – Category 3



Signal Word:

Hazard Statements:

Precautionary Statements: Harmful if swallowed. Causes skin irritation. Can cause serious eye damage. May cause allergic skin reaction. May cause respiratory irritation. Can cause damage to lungs through prolonged or repeated exposure.

Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not handle until safety precautions have been read and understood. Wear protective gloves, protective clothing, and eye protection. Use in well-ventilated area. Do not breathe dust. If exposed or concerned: get medical advice/attention.

| SECTION: 3 | Ingredients/Comp | onents |
|--------------------|------------------|-------------|
| Ingredients: | CAS # | % By Weight |
| Portland Cement: | 65997-15-1 | 10-30% |
| Lime: | 39445-23-3 | 5-10% |
| Crystalline Silica | 14808-60-7 | 40-70% |

| SECTION: 4 | First-Aid Measures |
|---------------|--|
| Eye Contact: | Rinse eyes thoroughly with water for at least 15 minutes, including under lids, to remove all particles. Seek medical attention for abrasion and burns. |
| Skin Contact: | Wash with cool water and a pH neutral soap or mild skin detergent. Seek medical attention for rash, irritation, dermatitis. |
| Inhalation: | Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside. |
| Ingestion: | Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control immediately. |

SECTION: 5 Fire-Fighting Measures

| Flashpoint and Method: | Non-combustible. |
|------------------------|---|
| General Hazard: | Avoid breathing smoke. |
| Extinguishing Media: | Use extinguishing media appropriate for surrounding fire. |

SECTION: 6 Accidental Release Measure

| General: | Place spilled material into a container. Avoid actions that cause the product dust to become airborne. |
|----------|--|
| | Avoid inhalation of dust. Wear appropriate protective equipment. |

Waste Disposal Method: Dispose of products according to Federal, State and Local regulations.

SECTION: 7 Handling and Storage

| General: | Avoid contact with skin and eyes. Avoid generating and breathing dust. Do not swallow. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc., is not recommended. Use only in well-ventilated areas. | | |
|----------------------|---|-------------------|------------|
| Storage Temperature: | Unlimited. | Storage Pressure: | Unlimited. |
| Clothing: | Promptly remove clothing that is dusty. Thoroughly wash skin after exposure to dust. | | |

SECTION: 8 Exposure Controls/Personal Protection

| Components with limit values that require monitoring at the workplace: | | | |
|--|------------|------------------------------|-------------------------------|
| Ingredients: | CAS # | PEL (OSHA) mg/M ³ | TLV (ACGIH) mg/M ³ |
| Portland Cement: | 65997-15-1 | 5 (resp) 15 (total) | 10 (resp) |
| Lime: | 39445-23-3 | 5 | 5 |
| Crystalline Silica: | 14808-60-7 | 0.1 | 0.025 (resp) |

| Engineering Controls: | Use local exhaust or general dilution ventilation or other suppression methods to maintain low dust levels. |
|-----------------------------|---|
| Personal Protective Equipme | ent (PPE): |
| Respiratory Protection: | Under ordinary conditions no respiratory protection is required. Wear a NIOSH approved respirator that is properly fitted and is in good condition when exposed to dust. |
| Eye Protection: | Wear ANSI approved glasses or safety goggles when handling product and when involved with activities that generate dust, to prevent contact with eyes. Wearing contact lenses when using concrete products, under dusty conditions, is not recommended. |
| Skin Protection: | Wear suitable protective gloves in the event of prolonged or repeated ski contact. |
| Foot Protection: | Wear ANSI approved hard-toed safety boots when handling concrete products. |

SECTION: 9 Physical and Chemical Properties Physical State: Powder Evaporation Rate: Appearance: Grey / Brown pH (in water)

| Appearance: | Grey / Brown | pH (in water) | N/A |
|------------------|--------------|----------------------|--------------|
| Odor: | None. | Boiling Point: | N/A |
| Vapor Pressure: | N/A. | Freezing Point: | None; solid. |
| Vapor Density: | N/A | Viscosity: | None; solid. |
| Special Gravity: | 2.0 | Solubility in Water: | < 1% |

N/A.

| SECTION: 10 St | tability and Reactivity |
|------------------------------------|--|
| Stability: | Considered to be stable. |
| Hazardous Decomposition Product | Decomposition products are unknown and not suspected. s: |
| Hazardous Polymerization: | Hazardous polymerization not known to occur. |
| Reactivity: | Material is considered inert. Avoid contact with strong acids, reducing agents, and oxidizers. |
| Condition to Avoid: | None. |

SECTION: 11 Toxicological Information

| Exposure Routes: | Skin contact, skin adsorption, eye contact, inhalation, or ingestion. | |
|--|--|--|
| Symptoms related to physical/chemical/toxicological characteristics: | Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis. Skin contact: Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture, and can cause alkali burns and affect the mucous membranes. Eye contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Ingestion: Harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting. | |
| | | |

SECTION: 12 Ecological Information

Generally considered chemically inert in the environment.

SECTION: 13 Disposal Information

Dispose of waste and containers in compliance with applicable Federal, State, and Local regulations.

SECTION: 14 Transport Information

This product is not classified as a Hazardous Material under U.S. DOT.

| SECTION: 15 | Regulatory Information |
|------------------------------------|---|
| OSHA/MSHA Hazard Communication: | This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program. |
| CERLA/SUPERFUND: | This product is not listed as CERCLA hazardous substance. |
| EPCRA SARA Title III: | This product has been reviewed according to the EPA Hazard Categories promulgated under section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered a hazardous chemical and a delayed health hazard. |
| EPCRCA SARA SECTION 313: | This product contains none of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. |
| RCRA: | If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. |
| California Proposition 65: | Crystalline silica (airborne particulates of respirable size) is a substance known by the State of California to cause cancer. |

SECTION: 16 Other Information

This Safety Data Sheet (SDS) was prepared on May 1, 2015. The information herein is given in good faith; no warranty is expressed or implied.

Conforms to HazCom 2012/United States

Safety Data Sheet Portland Cement

Section 1. Identification

GHS product identifier: Chemical name:

Other means of identification:

Portland Cement Calcium compounds, calcium silicate compounds, and other calcium compounds containing iron and aluminum make up the majority of this product. Cement, ASTM Type I, II, III, V, Portland Limestone Cement, Hydraulic Cement, CSA Type GU, GUb, GUL, MS, MH, MHL, HE, HEL, LH, LHL, HS

Relevant identified uses of the substance or mixture and uses advised against:

Building materials, construction, a basic ingredient in concrete.

Supplier's details:

32

í.

ì.

ž

Lehigh White Cement Company 7660 Imperial Way, Allentown, PA 18195 (610) 366-4600

Emergency telephone number (24 hours):

CHEMTREC: (800) 424-9300

Section 2. Hazards Identification

Overexposure to portland cement can cause serious, potentially irreversible skin or eye damage in the form of chemical (caustic) burns, including third degree burns. The same serious injury can occur if wet or moist skin has prolonged contact exposure to dry portland cement.

OSHA/HCS status: Classification of the substance or mixture: This material is considered hazardcus by the OSHA Hazard Communication Standard (29 CFR 1910.1200). SKIN CORROSION/IRRITATION – Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1 SKIN SENSITIZATION – Category 1 CARCINOGENICITY/INHALATION – Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] – Category 3

GHS label elements

Signal word: Hazard statements:

53

Precautionary statements:

Ghadan

Storage:

Disposal:

Danger Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause cancer.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use outdoors in a well ventilated area. Wash any exposed body parts thouroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated clothing must not be allowed out of the workplace. If exposed or concerned: Immediately get medical advice/attention if you feel unwell or irritation or rash occurs. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Rinse mouth. Do not induce vomiting.

Restrict or control access to stockpile areas (store locked up). Enguliment hazard: To prevent burial or suffocation, do not enter a confined space, such as a silo, bulk truck or other storage container or vessel that stores or contains cement without an effective procedure for assuring safety. Store in a well ventilated area. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

P

Dec 05 2017 10:06PM HP Fax

page 3

P

27 194

PRESS.

None known

Hazards not otherwise classified (HNOC):

Supplemental Information:

Respirable Crystalline Silica (RCS) may cause cancer. Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g., tridymite and cristobalite) may also be present or formed under certain industrial processes.

WHITE GEMENT

Section 3. Composition/information on ingredients

Substance/mixture: **Chemical Name:**

Mixture

16.10

Calcium compounds, calcium silicate compounds, and other calcium compounds containing iron and aluminum make up the majority of this product.

Einthia

CAS number/other identifiers

| and the second | 2 H A | 5 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1 |
|--|---|--|
| Ingredient name | % | CAS number |
| Portland Cement | 100% | 65997-15-1 |
| The structure of Portland cement may contain the following in some concentration ranges: | | |
| Calcium oxide | A-B | 1305-78-8 |
| Quartz | C-D | 14808-60-7 |
| Hexavalent chromium* | E-F | 18450-29-9 |
| Portiand cement also contains gypsum, limestone and magnesium oxide in various | | 10100-20-0 |
| concentrations. However, because these components are not classifiable as a hazard under Title | | |
| 89 Code of Federal Regulations 1910.1200, they are not required to be listed in this section. | | |
| Gwesum | G-H | 13397-24-5 |
| Limestone | 1-1 | 1317-65-3 |
| Magnešium oxide | K-L | 1309-48-4 |
| | 11 - 14 - 14 - 14 - 14 - 14 - 14 - 14 - | |

ä

Any concentration shown as a range is to protect confidentiality or is due to process variation.

*Hexavalent chromium is included due to dermal sensitivity associated with the component.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures Mag Eye Crimact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, L'entrin da occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 30 minutes. Chemical burns must be treated promptly by a physician. Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of portland cement requires Inhalation: immediate medical attention. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-tomouth resuscitation. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway. Skin Contact: Get medical attention immediately. Heavy exposure to portland cement dust, wet concrete or associated water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods such as watchbands and belts. Quickly and gently blot or brush away excess portland cement. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH natural scap. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposure to wet cement, cement mixtures or liquids from wet cement. Burns should be treated as caustic burns. Portland cement causes skin burns with little warning. Discomfort or pain cannot be relied upon to alert a person to dillin. a serious injury. You may not feel pain or the severity of the burn until hours after the exposure Chemical burns must be Mag treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO incisation: NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a . 71

WHITE CEMENT

折

position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Have victim drink 60 to 240 mL (2 to 8 oz.) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute and delayed potential acute health effects

Eye contact: Inhalation: Skin contact: Ingestion:

Causes serious eye damage. May cause respiratory irritation. Causes severe burns. May cause an allergic skin reaction. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Inhalation: Skin contact:

ingention: 44. 1

Adverse symptoms may include the following: pain, watering and redness. Adverse symptoms may include the following: respiratory tract irritation and coughing. Adverse symptoms may include the following: pain or irritation, redness and blistering may occur, skin burns, ulceration and necrosis may occur. Adverse symptoms may include the following: stomach pains.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician:

Specific treatments: **Protection of first-aiders:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Not applicable. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11) Chill.

Section 5. Fire-fighting measures

Interna Auto

Extinguishing media

| Suitable extingulahing media: Unsuitable extinguishing media: Specific hazards arising from the chemical: | Use an extinguishing agent suitable for the surrounding fire. Do not use water jet or water-based fire extinguishers. No specific fire or explosion hazard. |
|--|---|
| Hazardous thermal decomposition | Decomposition products may include the following materials: carbon dioxide, carbon monoxide, |
| Products: | sulfur oxides and metal oxide/oxides. |
| Special protective actions for fire- | Move containers from fire area if this can be done without risk. Use water spray to keep fire- |
| fighters: | exposed containers cool. |
| Special protective equipment for fire- | Fire-fighters should wear appropriate protective equipment and self-contained breathing |
| lighters: | apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6. Accidental release measures

Itvirten

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: **Environmental precautions:** For personal protective clothing requirements, please see Section 8. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Page 3 of 10

page 5

| 志 聲 | |
|-----------------|--|
| Buatic | WHITE CEMENT |
| 0 | Inform the relevant authorities if the product has entered the environment, including waterways, soil or air. Materials can enter waterways through drainage systems. |
| Methods and mat | erials for containment and cleaning up |
| Small spill: | Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with |

equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of waste material by using a licensed waste disposal contractor. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place dust in a closed, labeled waste container. Avoid

creating dusty conditions and prevent wind dispersal. Large spills to waterways may be hazardous

due to alkalinity of the product. Dispose of waste material using a licensed waste disposal

contractor. Note: see section 1 for emergency contact information and Section 13 for waste

A. CIT

Large spill:

P

Ē

te framete

Section 7. Handling and storage

disposal.

Precautions for safe handling Protective measures:

Advice on general occupational hygiene:

Conditions for safe storage, including any incompatibilities:

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure by obtaining and following special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material and keep the container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. A key to using the product safely requires the user to recognize that portland cement reacts chemically with water to produce calcium hydroxide which can cause severe chemical burns. Every attempt should be made to avoid skin and eye contact with cement. Do not get portland cement inside boots, shoes or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes before reuse. Do not enter a confined space that stores or contains portland cement unless appropriate procedures and protection are available. Portland cement can build up or adhere to the walls of a confined space and then release or fall suddenly (engulfment).

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------------------|---|
| Cement, portland, chemicals | ACGIH TLV (United States, 3/2012) TWA: 1 mg/m ³ 8hours. Form: Respirable fraction |
| | NIOSH REL (United States, 6/2009) TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total |
| Section | OSHA PEL (United States, 6/2010) TWA: 5mg/m ³ . 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ . 8 hours. Form: Total dust |

WHITE CEMENT

| Calcium oxide | ACGIH TLV (United States, 3/2012) TWA: 2 mg/m³ 8 hours |
|---|---|
| | NIOSH REL (United States, 6/2009) TWA: 2mg/m ³ 10 hours. |
| | OSHA PEL (United States, 6/2010) TWA: 5 mg/m³ 8 hours. |
| Limestone | NIOSH REL (United States, 6/2009) TWA: 5 mg/m ^a 10 hours. Form: Respirable fraction TWA: 10 mg/m ^a 10 hours. Form: Total |
| | OSHA PEL (United States, 6/2010) TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust |
| Magnesium oxide | ACGIH TLV (United States, 3/2012) TWA: 10 mg/m ^a 8 hours. Form: Inhalable fraction |
| | OSHA PEL (United States, 6/2010) TWA: 15 mg/m ^a 8 hours. Form: Total particulates |
| Qwartz | ACGIH TLV (United States, 3/2012) TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction |
| | NIOSH REL (United States, 6/2009) TWA: 0.05 mg/m ^a 10 hours. Form: Respirable dust |
| | OSHA PEL Z-3 (United States, 9/2005) TWA: 10 mg/m ³ divided by % SiO ₂ + 2: Respirable TWA: 30 mg/m ³ divided by % SiO ₂ + 2: Total |
| Calcium suifate (gypsum) | ACGIH TLV (United States, 3/2012) TWA: 10 mg/m ³ 8 hours. Form: Respirable fraction |
| | NIOSH REL (United States, 6/2009) TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 10 mg/m ³ 8 hours. Form: Total dust |
| 54 MAR 1 1 1 | OSHA PEL Z-1 (United States, 2/2006) TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust |
| Appropriate engineering controls: Use only with add | equate ventilation. If user operations generate dust, use process enclosures, |

Environmental exposure controls:

Use only with adequate ventilation. If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Ryglene measures:

Eye/face protection:

Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by portland cement with a pH neutral soap and clean, uncontaminated water. If clothing becomes saturated with portland cement, garments should be removed and replaced with clean, dry clothing. To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when hardling dust or yet exercise and tensor when each prevent eye contact.

| Number of the section | white cement |
|-------------------------|---|
| | |
| Hand protection: | Use impervious, waterproof, abrasion and alkali-resistant ployes. Do not rely on barrier groups in place |
| Body protection: | of impervious gloves. Do not get portland cement inside gloves. Use impervious, waterproof, abrasion and alkali-resistant boots and protective long-sleeved and long- legged clothing to protect the skin from contact with wet portland cement. To reduce foot and ankle exposure, wear impervious boots that are high enough to prevent portland cement from getting inside them. Do not get portland cement inside boots, shoes, or gloves. Remove clothing and protective |
| Other skin protection: | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the ricks involved |
| Respiratory protection: | Use properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and assigned protection factor of the selected respirator. |

Section 9. Physical and chemical properties

Appearance

| Physical State: | Solid. [P |
|-----------------------------|-----------|
| Color: | Grav or |
| Odor: | Odorles |
| Odor threshold: | Not avai |
| pH: | >11.5 (C |
| Melting point: | Not avai |
| Boiling point: | >1000°C |
| Flash point: | Not flam |
| Burning time: | Not avai |
| Burning rate: | Not avai |
| everyoration Rate: | Not appl |
| Flantmability (solid, gas): | Not appl |

Solid. [Powder] Gray or white Odorless Not available >11.5 [Conc. (% w/w): 1%] Not available >1000°C (>1832°F) Not flammable. Not combustible Not available Not available Not available Not applicable Not applicable Lower and Upper explosive flammable limits Vapor pressure: Vapor density: Relative density: Solubility: Solubility in water: Partition coefficient: n-octanol/water:

Auto-ignition temperature: Decomposition temperature: SADT: Viscosity: Not applicable Not applicable Not applicable 2.3 to 3.1 Slightly soluble in water 0.1 to 1%

Not applicable Not applicable Not available Not available Not applicable

Section 10. Stability and reactivity

Reactivity:

Chemical Stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Bur ang s. Bur ang s. Bur ang s. Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete. The product is stable. Under normal circumstances of storage and use, hazardous reactions will not occur.

No specific data. Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Portland cement is highly alkaline and will react with acids to produce a violent, heatgenerating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas-silicon tetrafluoride. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous decomposition products:

Section 11. Toxicological information

information on toxicological effects

Acute epxicity: Indiation/Gorrosion:

Portland Cement LD50/LC50 = Not available Skin: May cause skin irritation. May cause serious burns in the presence of moisture. Eyes: Causes serious eye damage. May cause burns in the presence of moisture.



Sensitization: **Mutagenicity:**

Asst

Respiratory: May cause respiratory tract irritation. May cause sensitization due to the potential presence of trace amounts of hexavalent chromium. There are no data available.

Classification below:

| And Configredient name | OSHA | IARC | ACGIH | NTP |
|-----------------------------|------|------|-------|---------------------------------|
| Cement, portland, chemicals | - | - | A4 | - |
| Quartz | - | 1 | A2 | Known to be a human carcinogen. |

Reproductive toxicity: Teratogenicity:

There are no data available. There are no data available.

Specific target organ toxicity (single exposure)

| | ame | Category | Route of Exposure | Target Organs |
|------------|---|------------|-----------------------------|---|
| 花を読 | Calcium oxide | Category 3 | Inhalation and skin contact | Respiratory tract irritation, skin irritation |
| 地震ななないまである | Brane Stripbriland, chemicals | Category 3 | Inhalation and skin contact | Respiratory tract irritation, skin irritation |
| | Contrasting a second | | | |

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of Exposure | Target Organs |
|--------|------------|-------------------|-------------------------------|
| Quartz | Category 1 | Inhalation | Respiratory tract and kidneys |
| | | | |

Aspiration hazard:

There are no data available.

| R. | | | | | |
|---|--|--|--|--|--|
| Information on the likely | information on the likely routes of exposure | | | | |
| Potentiaficute health effects: | Eye contact: Causes serious eye damage. Inhalation: May cause respiratory irritation. Skin contact: Causes severe burns. May cause an allergic skin reaction. | | | | |
| Symptoms related to the physical, chemical and toxicological characteristics: | Ingestion: May cause burns to mouth, throat and stomach. Eye contact: Adverse symptoms may include the following: pain, watering, redness. Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing Skin contact: Adverse symptoms may include the following: pain or irritation, redness, blistering may occur, skin burns, ulcerations and necrosis may occur Ingestion: Adverse symptoms may include the following: pain or irritation, redness, blistering may occur, skin burns, ulcerations and necrosis may occur | | | | |
| Delayed and immediate effects and also chronic effects from short and long term exposure: | Short term exposure Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards. | | | | |
| Beential chronic health effects: | Long term exposure Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards. General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. If sensitized to hexavalent chromium, a severe allergic dermal reaction may occur when subsequently exposed to very low levels. | | | | |
| | Carcinogenicity: Portland cement is not classifiable as a human carcinogen. Crystalline silica is considered a hazard by inhalation. IARC has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Excessive exposure to crystalline silica can cause silicosis, a non-cancerous lung disease. | | | | |

page 9

| Patrala | Mutagenicity: No known significant effects or critical hazards. | ogini i e cenvicivi i |
|---------------------------------|--|-----------------------|
| | Teratogenicity: No known significant effects or critical hazards. | |
| | Developmental effects: No known significant effects or critical hazards. | |
| Numerical measures of toxicity: | Fertility effects: No known significant effects or critical hazards. Acute toxicity estimates: There are no data available. | |

Section 12. Ecological Information

Toxicity

| Product/ingredient name | Result | Species | Exposure | | |
|-------------------------|--------------------------------------|---|----------|--|--|
| Calcium oxide | Chronic NOEC 100 mg/L Fresh water | Fish-Oreochromis niloticus-Juvenile (Fledgling, Hatchling, Weanling) | 46 days | | |

| Persistence and degradability: | There are not data available. |
|--------------------------------|--|
| Bioaccumulative potential: | There are not data available. |
| Mobility in soil: | Soll/water partition coefficient (Koc); Not available. |
| Other adverse effects: | No known significant effects or critical hazards. |

Section 13. Disposal considerations

Disposal methods:

Proc North

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Untreated waste should not be released to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe manner. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff, and contact with soil, waterways, drains and sewers.

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure

that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transportation information

Not available.

| 39 | DOT Classification | IMDG | ΙΑΤΑ |
|--------------------------------------|--------------------|----------------|---------------|
| UN number UN proper shipping name | Not regulated | Not regulated | Not regulated |
| Packing group Packing group | - - None | - - None | - |
| Additional information | - | - | - |

Special precautions for user:

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

- - -

U 114 Trai Angr. Pact Still Enviz.

Page 8 of 10

Phot Bitvia page 10

WHITE CEMENT

Section 15. Regulatory Information

TSCA 6 final risk management: Chromium, ion (Cr6+)

United States inventory (TSCA 8b): Cements are considered to be statutory mixtures under TSCA. CAS 65997-15-1 is included on the TSCA inventory.

GERCLA: This product is not listed as a CERCLA substance

Blean Air Act Section 112 (b): Hazardous Air Pollutants (HAPs) - Not listed

Clean Air Act Section 602: Class I Substances - Not listed

Clean Art Section 602: Class II Substances - Not listed

DEA List Chemicals: (Precursor Chemicals) – Not listed DEA:List II Chemicals: (Essential Chemicals) – Not listed

SARA 311/312

Classification:

Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

| Name C Jre | % | Fire Hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|-------------------------|------|----------------|----------------------------------|----------|---------------------------------------|---------------------------------|
| Clinding wide | A-B | No | No | No | Yes | No |
| Quarzier: | >0.1 | No | No | Na | No | Yes |
| Clindinatum, ion (Cr6+) | <0.1 | No | No | No | Yes | Yes |

SARA 313

| | Product name | CAS number | % |
|----------------------------|----------------------|------------|------|
| Form R-Report requirements | Chromium, ion (Cr6+) | 8540-29-9 | <0.1 |
| | | | |

| H | |
|---|---|
| State regulations Classification Marsachusetts: New Jersey: Pennsylvania: | The following components are listed: cement, portland, chemicals, limestone None of the components are listed. The following components are listed: cement, portland, chemicals, gypsum, limestone The following components are listed: cement, portland, chemicals, gypsum, limestone |

California Prop. 65

WARNING: This product contains crystalline silica and chemicals (trace metals) known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the above warning in the absence of definitive testing to prove the defined risks do not exist.

| løgredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level |
|--|------------|--------------|--------------------------------|--------------------------------------|
| Quartz Ghromium, ion (Cr6+) Classedara | Yes Yes | No Yes | No 0.001µg/day (inhalation) | No 8.2 micrograms/day (ingestion) |
| | | | | |

International regulations

International lists:

··-1. Canadian Domestic Substances List (DSL): Portland cement is included on the DSL. Mexico Inventory (INSQ): All components are listed or exempted.

WHITE CEMENT

Section 16. Other Information

May 21, 2015 May 21, 2015 May 21, 2015 Revised Section(s): N/Ap

Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of portland cement as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with portland cement to produce portland cement products. Users should review other relevant material safety data sheets before working with this portland cement or working on portland cement products, for example, portland cement concrete.

ELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY Lehigh Hanson, except that the product shall conform to contracted specifications. The information provided herein was believed by the Lehigh Hanson to be accurate at in a of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand repertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

Abbreviations

- ACGIH --- American Conference of Governmental Industrial Hygienists
- CAS Chemical Abstract Service
- CERCLA --- Comprehensive Emergency Response and Comprehensive Liability Act
- CFR Code of Federal Regulations OT Department of Transportation
- GHS Globally Harmonized System
- Reductigh Efficiency Particulate Air

- MDG International Maritime Dangerous Goods NIOSH National Institute of Occupational Safety and Health
- NOEC No Observed Effect Concentration
- NTP National Toxicology Program
- OSHA Occupational Safety and Health Administration
- PEL Permissible Exposure Limit
- REL Recommended Exposure Limit
- RQ Reportable Quantity
- SARA Superfund Amendments and Reauthorization Act
- SDS Safety Data Sheet
- TLV Threshold Limit Value
- IPQ Threshold Planning Quantity
- SCA Toxic Substances Control Act
- A Time-Weighted Average

\$



Safety Data Sheet

page 12

Page 1 of 9

Aggregate Product



Section 2. Hazards Identification

As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or pulverizing.

OSHA/HCS status:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Category Classification(s): GHS label elements: CARCINOGENICITY/INHALATION - Category 1

Hazard pictograms:



Signal word:

Danger

Hazard statements:

Precautionary Statements:

May cause cancer (Inhalation, Dermal).

Obtain special instructions before use Do not handle until all safety precautions have been read and understood

Safety Data Sheet

Wear eye protection, protective clothing, protective gloves If exposed or concerned: Get medical advice/attention Dispose of contents/container to comply with local/regional/national regulations

. Kangaran

i

Other Hazards:

Not applicable

Section 3. Composition / Information on Ingredients

Substance/mixture:

Aggregate Product

| Ingredient Name | % Content | CAS number |
|---|-----------|--------------------|
| Component of all aggregate products: Crystalline Silica (Quartz) | 0 - 100 | 14808-60-7 |
| contain greater than 0.1% crystalline silica. For example, limestone typically contains less than 1% crystalline silica, granite and gravel up to 40% and sand, up to 100%) | 0 - 100 | 14000-00-7 |
| Component of limestone only: Limestone (calcium carbonate, CaCO ₃) | 45 - 100 | 1317 -6 5-3 |

Any concentration shown as a range is to protect confidentiality or is due to process variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First-Aid Measures

As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or pulverizing.

Description of necessary first aid measures:

| General: | | Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. |
|------------|------|---|
| Eye conta | ct: | Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. |
| Inhalation | : | Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of Aggregate Products requires immediate medical attention. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. |
| Skin cont | act: | Quickly and gently blot or brush away excess product. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH neutral soap. Seek medical attention for irritation, dermatitis and prolonged unprotected exposures. Get medical attention if irritation persists. |
| Ingestion | : | Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Have victim drink 60 to 240 mL (2 to 8 oz.) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. |

1. 1.

Dec 05 2017 10:11PM HP Fax

page 14

 $\hat{\mathbf{i}}_{1,\dots,k_{2}}$

Page 3 of 9

Safety Data Sheet

Potential symptoms and effects from acute exposures (delayed or immediate):

| Eye contact: | May cause eye irritation. | | |
|---|---|--|--|
| Inhalation: | May cause respiratory irritation. | | |
| Skin contact: | May cause mechanical skin irritation. | | |
| Ingestion: | Not expected to be a significant route of entry. May cause gastrointestinal discomfort. | | |
| Potential symptoms and effects from over-exposures: | | | |
| Eye contact: | Adverse symptoms may include the following: pain, watering and redness | | |
| Inhalation: | Adverse symptoms may include the following: respiratory tract irritation and coughing | | |
| Skin contact: | Adverse symptoms may include the following: pain or irritation, redness | | |
| Ingestion: | Adverse symptoms may include the following: stomach pains | | |

Recommendations for immediate medical attention / treatment:

| If large quantities have been Ingested or inhaled: | Seek medical treatment and contact poison treatment specialist immediately. |
|---|---|
| Notes to physician: | Treat symptomatically. |
| Protection of first-aiders: | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

Section 5. Fire-fighting Measures

Extinguishing media

| Suitable extinguishing media: | Non-flammable. Use an extinguishing agent suitable for the surrounding fire. |
|--|---|
| Specific hazards arising from the chemical: | No specific fire or explosion hazard. |
| Hazardous thermal decomposition products: | Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides and metal oxide/oxides products: |
| Special protective actions for firefighters: | Evacuate area. Fight fire with normal precautions from a reasonable distance. Move containers from fire area if this can be done without risk. |
| Special protective equipment for fire-fighters: | Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection. |

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. For personal protective clothing requirements, please see Section 8.

| For non-emergency personnel: | Evacuate area, if necessary. Contact emergency personnel, if needed. Do not breathe dust. Stay upwind. |
|------------------------------|--|
| For emergency responders: | Evacuate surrounding areas if necessary. Keep unnecessary and unprotected personnel from entering. Do not breathe dust. Provide adequate ventilation. |

Safety Data Sheet

| Environmental precautions: | Avoid release to the environment. Contain the spill to avoid the discharge of spilled material |
|----------------------------|--|
| | into drains, surface waters and/or groundwater. If the spilled material enters any drainage |
| | systems, surface waters and/or groundwater, follow all applicable local, state and federal |
| | laws and regulations for additional clean-up and/or reporting requirements. |

Methods and materials for containment and cleaning up

Small and large spills:

Wear appropriate personal protective equipment as described in Section 8 for cleaning, containing and removing the spill. Minimize generation of dust. For small spills, clean with a vacuum with a filtration system sufficient to remove and prevent recirculation of cement dust (a vacuum equipped with a high-efficiency particulate air (HEPA) filter is recommended). For large spills, use control dust measures and carefully scoop or shovel into clean dry container for larter reuse or disposal. DO NOT USE COMPRESSED AIR TO CLEAN SPILLS. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions for safe handling

| Protective measures: | Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure by obtaining and following special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. |
|--|--|
| Advice on general occupational hygiene: | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. |
| Conditions for safe storage: | Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances. |

Section 8. Exposure Controls / Personal Protection

Occupational Exposure Limits

....

| | ACGIH TLV (United States, 3/2012). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable |
|---|--|
| | NIOSH REL (United States, 6/2009). |
| Quartz (crystalline sliica) | I VVA: 0.05 mg/m o nours. Porm: Respirable |
| | OSHA PEL Z-3 (United States, 9/2005). TWA: 10mg/m ³ divided by %SiO2 + 2: Respirable TWA: 30mg/m ³ divided by %SiO2 + 2: Total |
| | ACGIH TLV (United States, 3/2012). |
| | TWA: 10 mg/m ³ 8 hours. Form: Total |
| Limestone | NIOSH REL. (United States, 6/2009). TWA: 5 mg/m ³ 10 hours. Form: Respirable TWA: 10 mg/m ³ 10 hours. Form: Total Dust |
| | OSHA PEL (United States, 6/2010). |
| | TWA: 5 mg/m ³ 8 hours. Form: Respirable |
| | TWA: 15 mg/m ³ 8 hours. Form: Total dust |
| | ACGIH TLV (United States, 3/2012) |
| | TWA: 3 mg/m ³ 8 hours. Form: Respirable |
| | TWA: 10 mg/m ³ 8 hours. Form: Total dust |
| Particulates Not Otherwise Regulated (Total Dust) | COULD DEL (United States 8/0040) |
| | USHA PEL (United States, 6/2010). |
| | 1 WA: orig/m 8 hours. Form: Kespirable |
| | TWAL TO HIGHT & HOURS. PORT. TOtal Oust |

ł

Safety Data Sheet

Controls

| Appropriate engineering controls: | | Use only with adequate ventilation. If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. | | |
|-----------------------------------|---------------------------------------|--|--|--|
| | Environmental exposure controls: | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. | | |
| | Hygiene | | | |
| Wash | | Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by Aggregate Products with a pH neutral soap and clean, uncontaminated water. Rem | | |
| | | Remove protective equipment and dusty clothing before entering eating areas. | | |
| | PPE | | | |
| | Eye/face protection: | In case of dust production: protective goggles. Wearing contact lenses when working with cement is not recommended. | | |
| | Hand protection: | Wear gloves to prevent mechanical irritation. Recommended material: Nitrile® | | |
| | Body protection: | Under dusty conditions or when excessive skin contact is likely, wear coveralls or other suitable work clothing. | | |
| | ⁽⁷⁾ Other skin protection: | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved. Footwear and other gear to protect the skin should be approved by a specialist before handling this product. | | |
| | Respiratory protection: | Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and assigned protection factor of the selected respirator. | | |

Section 9. Physical and Chemical Properties

| Physical State: | Powder/Solid | Lower and upper explosive (fiammable) limits: | Not applicable. |
|----------------------------|---------------------------------|---|-----------------|
| Color: | Gray, white, various shades | Vapor pressure: | Not applicable. |
| Odor: | Odorless. | Vapor density: | Not applicable. |
| Odor threshold: | Not available. | Relative density: | 2.25 to 2.8 |
| pH (in water): | 4.0 to 10.0 | Solubility: | Not applicable |
| Melting point: | Not available. | Solubility In water: | Not applicable. |
| Boiling point: | >1000°C (>1832°F) | Partition coefficient: n-octanol/water: | Not applicable. |
| Flash point: | Not flammable. Not combustible. | Auto-ignition temperature: | Not applicable. |
| Burning time: | Not available. | Decomposition temperature: | Not available. |
| Burning rate: | Not available. | SADT: | Not available. |
| Evaporation rate: | Not applicable. | Viscosity: | Not applicable. |
| Flammability (solid, gas); | Not applicable. | | |

Safety Data Sheet

Section 10. Stability and Reactivity

| Reactivity: | Not reactive under normal conditions of storage and use. | |
|---|--|--|
| Chemical stability: | The product is stable. | |
| Possibility of hazardous reactions: | Under normal conditions of storage and use, hazardous reactions will not occur. | |
| Conditions to avoid: | No specific data. | |
| Incompatible materials: | Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride. | |
| I to an all and the second second second second | Lindex normal coorditions of storage and use bezerdous decomposition products should not be | |

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Toxicological Effects

| Acute toxicity: | Aggregate ProductsLD50/LC50 = Not available |
|------------------------|---|
| Irritation/Corrosion: | Skin: May cause skin irritation. Eyes: May cause eye irritation. Respiratory: May cause respiratory tract irritation. |
| Sensitization: | May cause sensitization due to the potential presence of trace amounts of hexavalent chromium. |
| Mutagenicity: | Not classified. |
| Reproductive toxicity: | Not classified. |
| Teratogenicity: | Not classified. |
| Aspiration hazard: | Not classified. |

Carcinogenicity Classification:

| Quartz (crystalline silica) | - | 1 | A2 | Known to be a human carcinogen. |
|-----------------------------|---|---|----|---------------------------------|

Specific target organ toxicity (single exposure): Product not classified

| Quartz (crystaliine silica) | Category 3 | Inhalation | Respiratory tract irritation |
|-----------------------------|------------|------------|------------------------------|

Specific target organ toxicity (repeated exposure): Product not classified

| Quartz (crystalline silica) | Category 2 | Inhalation | Respiratory tract and kidneys |
|-----------------------------|------------|------------|-------------------------------|

| | | Safety Data Sheet |
|---|---|--|
| F | Routes of exposure - Dermal co | entact, Eye contact, Inhalation, and Ingestion. |
| | Potential acute health effects: | Eye contact: May cause eye irritation. Inhalation: May cause respiratory irritation. Skin contact: May cause irritation. Ingestion: Not an anticipated route of entry. May cause gastrointestinal discomfort. |
| | Symptoms related to the physical, chemical and toxicological characteristics: | Eye contact: Adverse symptoms may include the following: pain, watering, redness Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing Skin contact: Adverse symptoms may include the following: pain or irritation, redness, Ingestion: Adverse symptoms may include the following: stomach pains |
| | Delayed and immediate effects and also chronic effects from short and long | Short term exposure Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards. |
| | | Long term exposure Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards. |
| | Potential chronic health effects: | General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. If sensitized to hexavalent chromium, a severe allergic dermal reaction may occur when subsequently exposed to very low levels. |
| | | Carcinogenicity : Quartz (crystalline silica) is considered a hazard by inhalation. IARC has classified Quartz (crystalline silica) as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Excessive exposure to Quartz (crystalline silica) can cause silicosis, a non-cancerous lung disease. |
| | | Mutagenicity: No known significant effects or critical hazards. |
| | 2.1 | Teratogenicity: No known significant effects or critical hazards. |
| | | Developmental effects: No known significant effects or critical hazards. |
| | | Fertility effects: No known significant effects or critical hazards. |
| | Numerical measures of toxicity: | There are no data available - acute toxicity estimates. |

Section 12. Ecological

Toxicity

| Persistence and degradability: | There are no data available. |
|--------------------------------|--|
| Bioaccumulation potential: | There are no data available. |
| Mobility in soil: | Soil/water partition coefficient (Koc): Not available. |
| Other adverse effects: | No known significant effects or critical hazards. |
| Ecotoxicity: | No recognized unusual toxicity to plants or animals |

Section 13. Disposal Considerations

Disposal methods:

. .

Salvage spilled sand and gravel where possible. Uncontaminated sand and gravel may be reused. Dispose of waste material in accordance with local, state and federal laws and regulations.

Page 8 of 9

Safety Data Sheet

Section 14. Transport Information

Special precautions for user: spillage.

Ensure that persons transporting the product know what to do in the event of an accident or

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not Regulated.

| Not Regulated | Not Regulated | Not Regulated |
|---------------|---------------|---------------|
| - | | • |
| | - | - |
| - | - | - |
| None | None | None |
| - | - | • |

Section 15. Regulatory Information

Status under USDOL-OSHA Hazard Communication Rule, 29 CFR 1910.1200 This product is considered a "hazardous chemical" under this regulation, and should be part of any hazard communication program.

Status under CERCLA/SUPERFUND 40 CFR 117 and 302 Not listed.

Hazard Category under SARA(Title III), Sections 311 and 312 This product qualifies as a "hazardous substance" with delayed health effects.

Status under SARA (Title III). Section 313

This product does not contain Emergency Planning and Community Right to Know (EPCRA") Section 313 chemicals in excess of the applicable de minimis concentration specified in EPCRA Section 313 Section 372.38(a). Trace amounts of naturally occurring chemicals might be detected during chemical analysis.

Status under TSCA (as of May 1997)

The ingredients of this product are listed on the TSCA inventory or are exempt.

Status under the Federal Hazardous Substances Act

This product is a "hazardous substance" subject to statutes promulgated under the subject act.

Status under California Proposition 65

This product contains up to 0.05 percent of chemicals (trace elements) known to the State of California to cause cancer, birth detects or other reproductive harm. California law requires the manufacturer to give the above warning in the absence of definitive testing to prove that the defined risks do not exist.

State Right to Know:

Quartz (crystalline silica) (14808-60-7)

- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Washington Permissible Exposure Limits TWAs

Limestone (1317-65-3)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Washington Permissible Exposure Limits TWAs

Safety Data Sheet

Section 16. Other Information

Approval or Revision History

Date of issue (mm/dd/yyyy): Revision: Revision: Revision: July 1998 April 2011 (Michael Tilton) Jun 2015 - Revised Section(s) per HCS-GHS April 2017 – related to address

Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of Aggregate Products as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Aggregates to produce Aggregate products. Users should review other relevant material safety data sheets.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY CEMEX, Inc. except that the product shall conform to contracted specifications. The information provided herein was believed by CEMEX to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Aggregates to produce. Aggregate products. Users should review other relevant safety data sheets.

Abbreviations

ACGIH - American Conference of Governmental Industrial Hygienists

CAS — Chemical Abstract Service

CERCLA -- Comprehensive Emergency Response and Comprehensive Liability Act

CFR -- Code of Federal Regulations DOT -- Department of Transportation

GHS - Globally Harmonized System Globally Harmonized System

HEPA - High Efficiency Particulate Air

IATA --- International Air Transport Association

IARC - International Agency for Research on Cancer

IMDG - International Maritime Dangerous Goods

NIOSH --- National Institute of Occupational Safety and Health

NOEC - No Observed Effect Concentration

NTP --- National Toxicology Program

OSHA - Occupational Safety and Health Administration

PEL -- Permissible Exposure Limit

REL - Recommended Exposure Limit RQ - Reportable Quantity

SARA --- Superfund Amendments and Reauthorization Act

SDS - Safety Data Sheet

TLV --- Threshold Limit Value

TPQ - Threshold Planning Quantity

TSCA — Toxic Substances Control Act

TWA --- Time-Weighted Average

UN - United Nations