



Section I. Identification

Product Identifier	Hydrated Lime
Other Means of Identification	General Purpose Lime, Hydrated Lime, Plaster lime, Calcium Hydrate, Calcium Hydroxide, General Purpose Lime, Lime Hydrate, Plaster Lime, Premium Lime, Slaked Lime
Chemical Name	Calcium Hydroxide (Ca(OH) ₂) make up most this product.
Relevant Uses	Binding Agent, Filler, and Mineral Processing, Mortar, Neutralizing Agent, PH Control, Reagent, Soil Stabilization, Water Treatment.
Manufacturer's Name	SESCO Cement Corp.
Address	8510 E Sam Houston Pkwy N Houston, TX 77044 Customer Care: 1-844-737-2687
Emergency Telephone Number	CHEMTREC: 1-800-424-9300

Section II. Hazards Identification

OSHA/HCS Status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Category Classification(s)	ACUTE TOXICITY SKIN CORROSION/IRRITATION EYE DAMAGE SKIN SENSITIZATION CARCINOGENICITY/INHALATION SINGLE TARGET ORGAN TOXICITY (SINGLE EXPOSURE) SINGLE TARGET ORGAN TOXICITY (REPEATED EXPOSURE)

GHS Label Elements:

Hazard Pictograms



Signal Word	Danger
Hazard Statements	Can cause skin burns & eye damage: avoid contact with the eyes and skin from both wet and dry powder. Wet powder can be corrosive to the eyes and skin and may cause skin sensitization (dermatitis)

Precautionary Statements:

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash clothing, hands, forearms and face thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Safety: Wear suitable protective clothing, gloves, and eye/face protection
Response	If swallowed : Rinse mouth. Do NOT induce vomiting If on skin : Wash with plenty of soap and water If on skin (or hair) : Take off immediately all contaminated clothing. Rinse skin with water If inhaled : Remove victim to fresh air immediately and keep at rest in a comfortable position for breathing. If in eyes : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing



Safety Data Sheet (SDS)

Section II. Hazards Identification
"Response" (continued)

If **exposed or concerned**: Get medical advice/attention
 Immediately call a doctor or **POISON CENTER**
 Get medical advice/attention if you feel unwell
 Specific treatment (see **Section 4** this label)
 If **skin irritation or rash occurs**: Get medical advice/attention
 Take off contaminated clothing and wash it before reuse
 Wash contaminated clothing before reuse

Storage Keep container tightly closed in a dry and well-ventilated area.

Disposal **Disposal**: Follow safety instructions and collect in containers for disposal as trade waste in accordance with local authority guidelines. Please dispose of packaging in appropriate general waste collection (not suitable for recycling).

Other Hazards None known.

Section III. Composition / Information on Ingredients

Substance/Mixture Hydrated Lime
 Chemical Name Calcium Hydroxide (Ca(OH)₂) make up most this product.

Ingredient Name	% Content	CAS #
Water	0.1 - 2.5%	7732-18-5
Calcium Hydroxide	90 - 95 %	1305-62-0
Magnesium Hydroxide	0.5 - 1 %	1309-42-8
Quartz (Crystalline Silica)	< 1 %	14808-60-7
Silicon Dioxide	0.5 - 2 %	7631-86-9
Aluminum Dioxide	0 - 2 %	1344-28-1
Iron Oxide	0 - 0.4 %	1309-37-1

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.

See **Section 8** for Occupational Exposure Limits.

Section IV. First Aid Measures
Description of Necessary First Aid Measures:

Eye Contact If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a poison center, a doctor, or for at least 15 minutes. If available, immediately flush eyes with a rinsing solution. The use of rinsing solution has been shown to significantly reduce the risk of permanent injury.

Inhalation Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of Hydrated Lime 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 Contact	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor. If available, immediately flush skin and hair with a skin wash.
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. 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	Causes serious eye damage.
Inhalation	May cause respiratory irritation.
Skin Contact	Causes severe burns. May cause an allergic skin reaction.
Ingestion	May cause burns to mouth, throat and stomach.

Over-Exposure Signs/Symptoms

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 and blistering may occur, skin burns, ulceration and necrosis may occur.
Ingestion	Adverse symptoms may include the following: stomach pains.

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific Treatments	Not applicable.
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.

See [Section 11](#) for more toxicological information.

Section V. Fire & Explosion Data

Extinguishing Media

Suitable Extinguishing Media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable Extinguishing Media	DO NOT use water jet or water-based fire extinguishers.
Danger of Violent Reaction or Explosion	Violent reactions with maleic anhydride, nitro ethane, nitro methane, nitroparaffins, nitro propane and phosphorus.
Specific Hazards Arising from The Chemical	Hydrated Lime is non-combustible and non-flammable. No specific fire or explosion hazard.

See [Section 9](#) for fire properties of this chemical including flash point, auto-ignition temperature, and explosive limits

Section VI. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Personnel Precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.
Protective Equipment/Clothing	Wear Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS.
Environmental Precautions	Avoid dispersal of spilled material and runoff and contact with waterways, drains and sewers. Inform the relevant authorities if reportable thresholds have entered the environment, including waterways or air. Materials can enter waterways through drainage systems.

Methods and Materials for Containment and Cleaning Up:

Dry Spills	Collect dry material using a scoop. Avoid actions that cause dust to become airborne. Avoid inhalation of dust and contact with skin. Wear appropriate personal protective equipment as described in Section 8 .
Wet Spills	Scrape up wet material and place in an appropriate container. Allow the material to "dry" before disposal.
Disposal	Do not attempt to wash Hydrated Lime down drains. Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust. Dispose of waste material according to local, state and federal regulations. See Section 13 for waste disposal.

Section VII. Handling and Storage

Precautions for Safe Handling:

Protective Measures	Put on appropriate PPE (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.
Advice on General Occupational Hygiene	Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
Conditions for Safe Storage, Including Any Incompatibilities	Store in a cool, dry, well-ventilated area, removed from incompatible substances and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.



Section VIII. Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	Agency/Standard	Exposure Limit
Calcium Oxide (CaO)	Cal/OSHA PEL (United States, 2018)	2 mg/m ³ 8 hour TWA (total)
	ACGIH TLV (United States, 2018)	2 mg/m ³ 8 hour TWA (total)
	NIOSH REL (United States, 2016)	2 mg/m ³ 10 hour TWA (total)
Quartz (Crystalline Silica) (SiO ₂)	Cal/OSHA PEL (United States, 2018)	0.05 mg/m ³ 8 hour TWA (total dust)
	ACGIH TLV (United States, 2018)	0.025 mg/m ³ 8 hour TWA (respirable fraction)
	NIOSH REL (United States, 2016)	0.05 mg/m ³ 10 hour TWA (total dust)

Exposure Controls

Appropriate Engineering Controls	All work with Hydrated Lime should be carried out in a manner that minimizes dust generation, exposure to dust and repeated skin contact. When handling Hydrated Lime, use local mechanical ventilation or extraction in areas where dust could escape into the work environment. For bulk deliveries, closed pumping systems are recommended. For handling of individual bags, follow instructions for personal protection. Work areas should be cleaned regularly by wet sweeping or vacuuming.
Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Personal Protective Equipment (PPE)



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.
Eye/Face Protection	To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling dust or wet cement. Wearing contact lenses when working with cement is not recommended.
Hand Protection	Use impervious, waterproof, abrasion and alkali-resistant gloves. Do not rely on barrier creams in place of impervious gloves. Do not get Hydrated Lime inside gloves.
Additional 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.
Body Protection	Use impervious, waterproof, abrasion and alkali-resistant boots and protective long-sleeved and longlegged clothing to protect the skin from contact with wet Hydrated Lime. To reduce foot and ankle exposure, wear impervious boots that are high enough to prevent Hydrated Lime from getting inside them. Do not get Hydrated Lime inside boots, shoes, or gloves. Remove clothing and protective equipment that becomes saturated with cement and immediately wash exposed areas of the body.

Hygiene Measures

Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by Hydrated Lime with a pH neutral soap and clean, uncontaminated water. If clothing becomes saturated with Hydrated Lime, garments should be removed and replaced with clean, dry clothing.



Section IX. Physical and Chemical Properties

Physical Properties		Chemical Properties	
Appearance	Fine white powder	pH Level (in Water)	13
Physical State	Solid	Solubility in Water	1.6 G/L
Odor	Odorless	Boiling Point	> 580° C (1076° F)
Density	450 - 500 kg/M ³ (Bulk)	Auto-Ignition Temperature	N/A
Melting Point	> 580° C (1076° F)	Decomposition Temp.	580° C (1076° F)
Viscosity	N/A	Flash Point	Not combustible
Vapor Pressure	N/A	Burning Time	N/A
Vapor Density	N/A	Flammability	Not flammable
Specific Gravity (H ₂ O = 1.0)	2.1 - 2.3	Evaporation Rate	N/A

Section X. Stability and Reactivity

Chemical Stability	Soluble in glycerol, aqueous solution of sucrose, and ammonium chloride.
Hazardous Reactions	Hydrated Lime is an alkaline material that reacts vigorously with acids, generating some heat. May absorb carbon dioxide from the atmosphere, forming calcium carbonate.
Conditions to Avoid	Contact with incompatible materials, unintentional contact with moisture.
Incompatible Materials	Incompatible with maleic anhydride and nitroparaffins.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section XI. Toxicological Information

Hydrated Lime is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain trace amounts of crystalline silica, which has been classified by IARC as carcinogenic to humans when inhaled in the form of quartz or cristobalite.

Ingredient Name	Route of Exposure	Known Chronic/Acute Effects
Quartz (Crystalline Silica) (SiO ₂)	Inhalation	<p>Silicosis (lung disease). Chronic exposure to crystalline silica dust above the occupational exposure limits (See Section 8) increases the risk of developing Silicosis. This disease is characterized by lung lesions (small benign mass in lungs). Symptoms include shortness of breath, coughing, wheezing and diminished chest expansion/lung volume.</p> <p>Lung Cancer. In accordance with OSHA's revision to standard 1926.1153 and as evidenced by studies and reports conducted by IARC and NTP, regular, repeated exposure to respirable crystalline silica is heavily linked to cases of lung cancer.</p>

Section XII. Ecological Information

Ecotoxicity	Because of the high pH of this product, it would be expected to produce significant acute ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Persistence and Degradability	Product has no bioaccumulation or food chain toxicity potential.



Mobility Soluble in water (as hydroxide) to form alkaline solution. Low mobility in most ground conditions.

Section XIII. Disposal Information

Disposal Recommendations The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any byproducts 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.

Neutralization Neutralize with dilute acid (e.g. 3 mol/L hydrochloric acid) or similar. For small amounts, absorb with sand.

Section XIV. Transportation Data

DOT Hazard Classification Hydrated Lime is not hazardous under U.S. Department of Transportation (DOT) regulations.

Placard Required N/A

Label Required Label as required by the OSHA Hazard Communication standard {29 CFR 1910.1200(f)}, and applicable state and local regulations.

Special Precautions for User 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 XV. Regulatory Information

OSHA Crystalline Silica is not listed as a carcinogen. Product may contain trace amounts of hexavalent chromium [Cr(VI)] and certain chromium compounds which are listed in the NTP and IARC lists of carcinogens

SARA Title III: Section 311, 312 Immediate health hazard and delayed health hazard.

EPCRA (Emergency Planning and Community Right to Know Act) Crystalline silica (quartz) is not an extremely hazardous substance under regulations of the Emergency Planning and Community Right to Know Act, 40 CFR Part 355, Appendices A and B and the product is not a toxic chemical subject to the requirements of Section 313.

FDA Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3). (The FDA standard primarily applies to products containing silica used in the coatings of food contact surfaces).

California Proposition 65 Respirable crystalline silica is classified as a substance known to the state of California to be a carcinogen. Cr(VI) is classified as substances known to the state of California to cause cancer and cause reproductive toxicity.

Massachusetts Toxic Use Reduction Act Respirable crystalline silica is considered toxic per the Massachusetts Toxic Use Reduction Act when used in abrasive blasting and molding.

Pennsylvania Worker and Community Right to Know Act Quartz is considered hazardous for purposes of the Act, but it is not a special hazardous substance or an environmental hazardous substance.



Section IX. Other Information

Definitions of Acronyms/Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	US Code of Federal Regulations
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act
DOT	Department of Transportation
FDA	Food and Drug Administration
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NIOSH REL	NIOSH Recommended Exposure Limit
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration, US Department of Health and Human Services
OSHA PEL	OSHA Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
SARA	Title III of the Superfund Amendments and Reauthorization Act, 1986
SDS	Safety Data Sheet
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time-Weighted Average

User's Responsibility	The OSHA Hazard Communication Standard 29 CFR 1910.1200 requires that this SDS be made available to your employees who handle or may be exposed to this product. Educate and train your employees regarding applicable precautions. Instruct your employees to handle this product properly.
Disclaimer	The information contained in this document applies to this specific material as supplied and SESCO Cement believes that the information contained in this SDS is accurate. The suggested precautions and recommendations are based on recognized good work practices and experience as of the date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance as not all use circumstances can be anticipated. It may not be valid for this material if it is used in combination with other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for one's own particular use. Since the actual use of the product described herein is beyond our control, SESCO Cement, assumes no liability arising out of the use of the product by others. Appropriate warnings and safe handling procedures should be provided to handlers and users. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulation, rules or insurance requirement. However, product must not be used in a manner which could result in harm.
More Information	An electronic version of this SDS is available at www.sescocement.us . More information on the effects of crystalline silica exposure may be obtained from OSHA (phone number: 1-800-321-OSHA; website: http://www.osha.gov) or from NIOSH (phone number: 1-800-35-NIOSH; website: http://www.cdc.gov/niosh).
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