

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product Name:	Ecologic™ Grout		
Brand:	Ecologic™		
Recommended Use:	Lime Injection Grout		
Supplier's Details:	LimeWorks.us 3145 State Road Telford, PA 18969	Phone: 215-536-6706 Fax: 215-453-1310 Website: www.limeworks.us	
Emergency Phone Number:	InfoTrac 1-800-535-5053		

SECTION 2 – HAZARD IDENTIFICATION

 GHS05 Corrosion	 GHS07 Irritant	 GHS08 Health Hazard			
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Signal word: Danger

Hazard statements:

When this product is humid or mixed with water – H314 Causes severe skin burns and eye damage.
 H350: May cause cancer.
 H372 Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation).

Precautionary statements:

P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P260: Do not breathe dusts or mists.
 P264: Wash hands/nails/face thoroughly after handling.
 P270: Do not eat, drink, or smoke when using this product.
 P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P405: Store locked up.
 P501: Dispose of contents/container into safe container in accordance with local, regional, or national regulations.
 P308+P313: IF exposed or concerned: Get medical attention.
 P314: Get medical attention if you feel unwell.
 P301+P330+P331: IF SWALLOWED rinse mouth. Do NOT induce vomiting.
 P303+P361+P353: IF ON SKIN (or hair) take off immediately all contaminated clothing. Rinse skin with water.
 P363: Wash contaminated clothing before reuse.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P304+P340: IF INHALED remove person to fresh air and keep comfortable for breathing.
 P310: Immediately call a doctor.
 KEEP OUT OF REACH OF CHILDREN

NFPA ratings (scale 0 – 4)

	Health = 3 Fire = 0 Reactivity = 0 Special Notice = None
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HMIS-ratings (scale 0 – 4)									
<table border="1"> <tr> <td>HEALTH</td> <td>3</td> </tr> <tr> <td>FLAMMABILITY</td> <td>0</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>J</td> </tr> </table>	HEALTH	3	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	J	Health = 3 Flammability = 0 Physical Hazard = 0 Personal Protection = J
HEALTH	3								
FLAMMABILITY	0								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	J								

Other hazards	None known
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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

CAS: 1305-62-0 RTECS: EW2800000	Calcium Hydroxide Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Acute 3; H315, H318, H335, H402	10-20%
CAS: 1305-78-8 RTECS: EW3100000	Calcium Oxide Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H315, H318, H335	< 1%
CAS: 14808-60-7 RTECS: VV7565000	Crystalline Silica Carc. 1A; STOT RE 1; H350, H372	10-50%
CAS: 1317-65-3 RTECS: EV9580000	Calcium Carbonate –	30-60%
CAS: 10034-77-2 RTECS: DG0875000	Calcium Silicate –	5-20%
CAS: 1344-28-1 RTECS: BD1200000	Aluminium Oxide –	0.5-5%
CAS: – RTECS: –	Sand (may be composed of varying granite and silica material) –	0% or 40-85%
CAS: – RTECS: –	May also contain Magnesium Oxide, Potassium Oxide, Ferric Oxide, ...	< 1%

May also contain ~1 of less of Magnesium oxide, Potassium oxide, Sodium oxide, Ferric oxide, ... * May exceed the limit ...

SECTION 4 – FIRST AID MEASURES

Inhalation:	Remove source of contamination or have person move to fresh air. If not breathing, give artificial respiration. Obtain medical attention immediately.
Skin Contact:	Wash contaminated area with running water for at least 15-20 minutes, while removing contaminated clothing. Obtain medical attention. Launder contaminated clothing before re-use.
Eye Contact:	Immediately flush the contaminated eye(s) with gently flowing water for at least 15-20 minutes. Obtain medical attention.
Ingestion:	NEVER give anything by mouth if the person is rapidly losing consciousness, or is unconscious, or convulsing. Rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Obtain Medical attention immediately.

SECTION 5 – FIRE FIGHTING MEASURES

Fire Hazards/Conditions of Flammability:	This product is not flammable or combustible
Flash Point (Method):	Not Determined
Lower Flammable Limit (% by volume):	Not Determined
Upper Flammable Limit (% by volume):	Not Determined
Sensitivity to Mechanical Impact:	Probably not sensitive.
Sensitivity to Static Discharge:	Probably not sensitive.
Auto-Ignition Temperature:	Not Determined
Suitable Extinguishing Media:	Carbon dioxide, dry chemical powder, and appropriate foam for surrounding products.
Special Fire-Fighting Procedures/Equipment:	During a fire, irritating/toxic smoke and fumes may be generated by surrounding products. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece.
Hazardous Combustion Products:	Carbon oxides, other irritating fumes, and smoke generated by surrounding products

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Remove all ignition sources. Remove or isolate flammable and combustible materials. All persons dealing with clean-up should wear the appropriate protective equipment (See section 8).
Environmental Precautions:	Confine spill, preventing it from entering sewer lines or waterways. Dispose of as per local, state, and federal regulations
Spill Response / Cleanup:	Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product Notify the appropriate authorities as required.

SECTION 7 – HANDLING AND STORAGE

Safe Handling Procedures:	Before handling, it is very important that engineering controls are operating, and that protective equipment requirements, and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Handling equipment should be properly grounded. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dusts. Avoid contact with eyes, skin, and clothing. Avoid generating high concentrations of dusts. Keep away from incompatible materials such as strong oxidizing materials. Keep containers closed when not in use.
Storage Requirements:	Store in a cool, dry, well-ventilated area out of direct sunlight. Store away from incompatible materials. Inspect all incoming containers to make sure they are properly labeled and not damaged. Storage area should be clearly identified, clear of obstruction, and accessible only to trained personnel. Inspect periodically for damage or leaks.
Incompatible Materials:	STRONG OXIDIZING MATERIALS, strong acids, some metals.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:	There is no available data for the product. See below for individual ingredient exposure limits.			
Ingredient CAS	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Calcium hydroxide 1305-62-0	15 mg/m ₃	Not Determined	10 mg/m ₃	Not Determined
Calcium oxide 1305-78-8	5 mg/m ₃	Not Determined	2 mg/m ₃	Not Determined
Crystalline Silica 14808-60-7	10 mg/m ₃ † (resp.) %SiO ₂ +2	Not Determined	.1 mg/m ₃ † (resp.)	Not Determined
Calcium Carbonate 1317-65-3	15 mg/m ₃ 5 mg/m ₃ (resp.)*	Not Determined	10 mg/m ₃ 5 mg/m ₃ (resp.)*	Not Determined
Calcium Silicate 10034-77-2	–	–	–	–
Aluminium Oxide 1344-28-1	5 mg/m ³	–	10 mg/m ³	--
Sand	–	–	–	–
May also contain Magnesium Oxide, Potassium Oxide, Ferric Oxide, ...	–	–	–	--

* Respirable fraction.

** Crystalline silica is expected to be below 1%, but concentrations may vary with source material

† The OSHA Permissible Exposure Limit (PEL) for Silicon Dioxide (SiO₂) is dependent upon the percentage of free silica in the dust and is calculated by a formula given.

Engineering Controls:	Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits.
Respiratory Protection:	Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirator if the exposure limits are unknown.
Protective Clothing/Equipment:	Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mist and dust from entering the eyes. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
General Hygiene Considerations:	Avoid generating high concentrations of dusts. Avoid contact with skin and eyes. Avoid breathing dusts or mists. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State, Color, Etc:	White to gray powder.	Upper / lower flammability or explosive limits:	Not Determined
Odor:	Odorless	Vapor Pressure:	Not Determined
Odor Threshold:	Not Determined	Vapor Density:	Not Determined
pH:	~12.3	Relative Density:	Not Determined
Melting / Freezing Point:	Not Determined	Solubility(ies):	Slightly in water
Initial Boiling Point and Boiling Range:	Not Determined	Partition Coefficient: n-octanol/water:	Not Determined
Flash Point:	Not Determined	Auto-Ignition Temperature:	Not Determined
Evaporation Rate:	Not Determined	Decomposition Temperature:	Not Determined
Flammability (solid, gas):	Not Determined	Viscosity:	Not Determined

SECTION 10 – STABILITY AND REACTIVITY DATA

Reactivity:	Not Determined
Chemical Stability:	Stable under the recommended storage and handling conditions prescribed.
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Conditions to Avoid:	Incompatible materials (see Section 7).
Incompatible Materials:	Incompatible materials (see Section 7).
Hazardous Decomposition Products:	Hazardous combustion products (see Section 5).

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Exposure:	Eye contact, ingestion, inhalation, skin contact.	
Effects of Short-Term (Acute) Exposure:		
Eyes:	Direct eye contact may cause moderate eye irritation or burn. Symptoms may include redness, stinging, tearing, and pain.	
Ingestion:	Ingestion may cause irritation or burn to the mouth, throat, and stomach. Symptoms may include dizziness, drowsiness, nausea, headache, and other central nervous system effects.	
Inhalation:	May cause irritation or burn to the nose, throat, and respiratory tract. Symptoms may include burning sensation, sore throat, runny nose, coughing, wheezing, shortness of breath, and difficulty breathing.	
Skin:	Direct skin contact may cause moderate to severe irritation or burn.	
Effects of Long-Term (Chronic) Exposure:		
Inhalation:	Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis. In advanced stages, loss of appetite, pleuritic pain, and total incapacity to work. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. Crystalline silica is classified as group 1 "known to be carcinogenic to humans" by IARC and "sufficient evidence" of carcinogenicity by the NTP. – Based on Human Evidence	
Other Important Hazards:	Not Determined	
Numerical Measures of Toxicity:		
Ingredient	CAS # and RTECS #	LD ₅₀ (route, species)
Calcium Hydroxide	CAS: 1305-62-0 RTECS: EW2800000	7,340 mg/kg Oral, Rat

Calcium Oxide	CAS: 1305-78-8 RTECS: EW3100000	Not Determined
Crystalline Silica	CAS: 14808-60-7 RTECS: VV7565000	Not Determined
Calcium Carbonate	CAS: 1317-65-3 RTECS: EV9580000	6,450 mg/kg Oral, Rat
Calcium Silicate	CAS: 10034-77-2 RTECS: DG0875000	Not Determined
Aluminium Oxide	CAS: 1344-28-1 RTECS: BD1200000	Not Determined

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity:	There is no available data on the product itself.
Persistence and Degradability:	Not Determined
Bioaccumulative Potential:	Not Determined
Mobility in the Soil:	Not Determined
Other Adverse Effects:	Not Determined

SECTION 13 – WASTE DISPOSAL

Disposal must be in accordance with National or Local legislation and directives.
 Bags are exclusively for containing the product and must not be utilized for other use.
 Dispose of the contents and bags at a point of refuse collection.
 Harden the product before disposal by wetting it. Bags should be totally emptied.

SECTION 14 – TRANSPORTATION INFORMATION

UN Number	Non-Regulated Material	Environmental Hazards	Not Applicable
UN Proper Shipping Name	Non-Regulated Material	Transport in Bulk	Not Applicable
Transport Hazard Class(es)	Non-Regulated Material	Special Precautions	Not Applicable
Packing Group	Non-Regulated Material		

SECTION 15 – REGULATORY INFORMATION

OSHA Information:	This product is regulated according to OSHA. This SDS contains all the information required by OSHA.				
TSCA Information:	The ingredients in this product are listed on the TSCA.				
National Fire Protection Association (NFPA):					
HEALTH: 3	FLAMMABILITY: 0	INSTABILITY: 0	SPECIAL HAZARDS: Refer to Section 1 & 3		
HAZARD SCALE:	0 = Minimal	1 = Slight	2 = Moderate	3 = Serious	4 = Severe
New Jersey Labeling Requirements:	Ingredients to be disclosed on product labeling: Refer to Section 3.				
California Proposition 65:	This product contains chemicals that are known to the State of California to cause cancer or other reproductive harm.				

SECTION 16 – OTHER INFORMATION

References:	1. Safety Data Sheets from manufacturer/supplier.		
Abbreviations:			
ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
AIHA	American Industrial Hygiene Association	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service	PEL	Permissible Exposure Limit
DSL	Domestic Substance List	STEL	Short-term Exposure Limit
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
LC	Lethal Concentration	TSCA	Toxic Substances Control Act
LD	Lethal Dosage	TWA	Time Weighted Average
N/A	Not Applicable/Not Available	WHMIS	Workplace Hazardous Materials Information System
NIOSH	National Institute for Occupational Safety and Health		
H315	Causes skin irritation		
H318	Causes serious eye damage		
H319	Causes serious eye irritation		
H335	May cause respiratory irritation		
H350	May cause cancer		
H372	Causes damage to organs through prolonged or repeated exposure		
H402	Harmful to aquatic life		

To be best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. End of the SDS.