





| SECTION 1 - IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER |   |  |   |
|--|---|--|---|
| <b>Product Name:</b>   | Ecologic™ Silane  |  |   |
| <b>Brand:</b>  | Ecologic™   |  |   |
| <b>Recommended Use:</b>  | For industrial use as a clear, penetrating, breathable VOC-compliant surface treatment on concrete and other mineral building materials.  |  |   |
| <b>Supplier's Details:</b>   | <table border="0"> <tr> <td>LimeWorks.us<br/>3145 State Road<br/>Telford, PA 18969</td> <td>Phone: 215-536-6706<br/>Fax: 215-453-1310<br/>Website: www.limeworks.us</td> </tr> </table> | LimeWorks.us<br>3145 State Road<br>Telford, PA 18969 | Phone: 215-536-6706<br>Fax: 215-453-1310<br>Website: www.limeworks.us |
| LimeWorks.us<br>3145 State Road<br>Telford, PA 18969                       | Phone: 215-536-6706<br>Fax: 215-453-1310<br>Website: www.limeworks.us   |  |   |
| <b>Emergency Phone Number:</b>   | InfoTrac : 1-800-535-5053   |  |   |

| SECTION 2 - HAZARD IDENTIFICATION   |   |  |  |  |  |
|---|---|--|--|--|--|
|    |  |  |  |  |  |
| GHS02<br>Flammable Liquid   | GHS07<br>Irritant   |  |  |  |  |
| <b>Signal Word:</b> Warning   |   |  |  |  |  |
| <b>Hazard Statements:</b>   |   |  |  |  |  |
| H226: Flammable liquid and vapor<br>H315: May cause skin irritation<br>H318: May cause serious eye damage   |   |  |  |  |  |
| <b>Precautionary Statements:</b>  |   |  |  |  |  |
| P102: Keep out of reach of children<br>P280: Wear protective gloves/clothing/eye and face protection<br>P305+P351+P338+P310: In case of contact with the eyes, rinse carefully with clean water for several minutes. In relevant cases, take off contact lenses if possible. Immediately call a Poison Center or a doctor/physician.<br>P302+P352: If in contact with skin: wash abundantly with soap and water.<br>P332+P313: For skin irritation: consult a doctor.<br>P312: Call a Poison Center in case of general feeling of sickness.<br>P370+P378: In case of fire use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.<br>P501: Do not empty excess materials into drains or water ways, but let dry and discard solid leftover waste with regular garbage. |   |  |  |  |  |
| <b>NFPA Ratings (Scale 0 - 4):</b>  |   |  |  |  |  |
|    | Health = --<br>Fire = 2<br>Reactivity = 1<br>Special Notice = None                |  |  |  |  |
| <b>HMIS Ratings (Scale 0 - 4):</b>  |   |  |  |  |  |
|    | Health = 2<br>Flammability = 2<br>Physical Hazard = 1<br>Personal Protection = 1  |  |  |  |  |
| <b>Other Hazards:</b>   | None Known  |  |  |  |  |

### SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

|                 |                         |        |
|-----------------|-------------------------|--------|
| CAS: 17980-47-1 | Isobutyltriethoxysilane | <=100% |
|-----------------|-------------------------|--------|

### SECTION 4 - FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | If aerosol or mists are inhaled, take affected persons out into the fresh air. Possible discomforts include severe irritation of mucus lining (nose, throat, eyes), cough, sneezing and flow of tears. In case of persistent discomfort, obtain medical attention immediately. |
| <b>Skin Contact:</b> | Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Obtain medical attention immediately if symptoms occur. Wash clothing before reuse.   |
| <b>Eye Contact:</b>  | Keeping eyelid open, immediately rinse thoroughly for at least 5 minutes using plenty of water or, if necessary, eye rinsing solution. In case of persistent discomfort: Consult an ophthalmologist.   |
| <b>Ingestion:</b>    | If swallowed, rinse mouth with water (only if the person is conscious). Call a physician immediately.  |

### SECTION 5 - FIRE FIGHTING MEASURES

|   |   |
|---|---|
| <b>Fire Hazards/Conditions of Flammability:</b>     | Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.  |
| <b>Flash Point (Method):</b>                        | Not Determined  |
| <b>Lower Flammable Limit (% by volume):</b>         | Not Determined  |
| <b>Upper Flammable Limit (% by volume):</b>         | Not Determined  |
| <b>Sensitivity to Mechanical Impact:</b>            | Not Determined  |
| <b>Sensitivity to Static Discharge:</b>             | Not Determined  |
| <b>Auto-Ignition Temperature:</b>                   | Not Determined  |
| <b>Suitable Extinguishing Media:</b>                | Water spray. Alcohol resistant foam. Carbon Dioxide. dry powder   |
| <b>Special Fire-Fighting Procedures/ Equipment:</b> | Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. |
| <b>Hazardous Combustion Products:</b>               | Not Determined  |

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

|                                   |   |
|-----------------------------------|---|
| <b>Personal Precautions:</b>      | Ensure adequate ventilation. Use personal protective equipment.   |
| <b>Environmental Precautions:</b> | Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.   |
| <b>Spill Response / Cleanup:</b>  | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

### SECTION 7 – HANDLING AND STORAGE

|                                  |  |
|----------------------------------|--|
| <b>Safe Handling Procedures:</b> | Use in the open air or with adequate ventilation. Wear personal protective equipment; see section 8. Keep away from heat, sparks, flames and other sources of ignition. Keep container tightly closed. Use only with adequate ventilation. Vapors may spread long distances and travel to areas away from the work site before igniting or flashing back to the vapor source.  |
| <b>Storage Requirements:</b>     | Take precautionary measures against static charges, keep away from sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture. Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container. This material may have a low electrical conductivity and therefore may accumulate dangerous levels of static electricity. An ignitable vapor-air mixture can form inside storage tanks. The user must be sure to dissipate static charge by careful bonding and grounding of all equipment and personnel involved in fluid transfer with continuity checks to prove effectiveness. Additional precautions against fire and explosion are the use of inert gas to purge vapor space; dip-pipes while filling vessels, especially lined vessels; grounded tank level floats; reduced flow velocity; self-closing valves on transfer lines and flame arrestors in vent lines. Additional guidance on fire and explosion protection may be found in various consensus standards, including NFPA 30, 69 and 77 and API 2003 as well as OSHA regulation 29CFR1910.106. Follow all SDS/label precautions even after container is emptied because it may retain product residues. |
| <b>Incompatible Materials:</b>   | None   |

### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

|  |  |  |  |
|--|--|--|--|
| <b>Exposure Limits:</b>                | None of the components have assigned exposure limits.  |  |  |
| <b>Engineering Controls:</b>           | Provide adequate ventilation.  |  |  |
| <b>Respiratory Protection:</b>         | A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.  |  |  |
| <b>Protective Clothing/Equipment:</b>  | Material: Polychloroprene (PCP)<br>Break-through time: >= 480 min<br>Material: Fluorinated rubber (FKM)<br>Break-through time: >= 480 min<br>Guideline: Source: GESTIS substance database (hazardous substance information system of commercial professional associations) Additional Information: Use impermeable gloves., The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use., Selection of protective gloves to meet the requirements of specific workplaces., Suitability for specific workplaces should be clarified with protective glove manufacturers. |  |  |
| <b>General Hygiene Considerations:</b> | Avoid contact with skin, eyes and clothing. Do not inhale vapors or aerosols. Do not eat, drink, or smoke when using the product. Remove contaminated or saturated clothing.   |  |  |

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|                                    |           |  |                |
|------------------------------------|-----------|--|----------------|
| <b>Physical State, Color, Etc:</b> | Colorless | <b>Upper / lower flammability or explosive limits:</b> | Not Determined |
|------------------------------------|-----------|--|----------------|

|   |  |  |  |
|---|--|--|--|
| <b>Odor:</b>                                    | Solvent-like   | <b>Vapor Pressure:</b>                         | 33 Pa (20 °C)<br>(OECD Test Guide-<br>line 104) dynamic<br><br>method<br>49 Pa (25 °C)<br>(OECD Test Guide-<br>line 104) dynamic<br>method |
| <b>Odor Threshold:</b>                          | Not Determined   | <b>Vapor Density:</b>                          | approx. 0.88 g/<br>cm <sup>3</sup> (20 °C) (DIN<br>51757)  |
| <b>pH:</b>                                      | Not Determined   | <b>Relative Density:</b>                       | 0.88 (20 °C)<br>(OECD Test Guide-<br>line 109)   |
| <b>Melting / Freezing Point:</b>                | < -72 °C (OECD TG<br>102)                                    | <b>Solubility(ies):</b>                        | Soluble in water   |
| <b>Initial Boiling Point and Boiling Range:</b> | approx. 186 °C (1,013<br>hPa) (DIN 51 751)                   | <b>Partition Coefficient: n-octanol/water:</b> | Not Determined   |
| <b>Flash Point:</b>                             | 63 °C (DIN EN ISO<br>2719 (Pensky-Mar-<br>tens, Closed Cup)) | <b>Auto-Ignition Temperature:</b>              | Not Determined   |
| <b>Evaporation Rate:</b>                        | Not Determined   | <b>Decomposition Temperature:</b>              | Not Determined   |
| <b>Flammability (solid, gas):</b>               | Not Determined   | <b>Viscosity:</b>                              | Medium   |

### SECTION 10 - STABILITY AND REACTIVITY DATA

|  |   |
|--|---|
| <b>Reactivity:</b>                         | No dangerous reaction known under conditions of normal use.   |
| <b>Chemical Stability:</b>                 | Stable under the recommended storage and handling conditions prescribed.  |
| <b>Possibility of Hazardous Reactions:</b> | No dangerous reactions known.   |
| <b>Conditions to Avoid:</b>                | In the presence of oxygen and heat, the ethanol forming during the reaction may produce acetaldehyde. Material may form acetaldehyde when heated with inorganic pigments in the presence of air. Avoid high temperatures and sources of ignition. |
| <b>Incompatible Materials:</b>             | Water   |
| <b>Hazardous Decomposition Products:</b>   | Ethanol in case of hydrolysis Alcohol formed by hydrolysis lowers the flashpoint of the product.  |

### SECTION 11 – TOXICOLOGICAL INFORMATION

|   |  |
|---|--|
| <b>Routes of Exposure:</b>                      | Eye contact, ingestion, inhalation, skin contact.                              |
| <b>Effects of Short-Term (Acute) Exposure:</b>  |  |
| <b>Eyes:</b>                                    | Not irritating Rabbit: Not irritating  |
| <b>Ingestion:</b>                               | LD 50 (Rat): > 5,000 mg/kg   |
| <b>Inhalation:</b>                              | LC 50 (Rat): 5.88 ng/l Dusts, mists and fumes                                  |
| <b>Skin:</b>                                    | Maximization test, OECD Test Guideline 406 (Guinea Pig): Not a skin sensitizer |
| <b>Effects of Long-Term (Chronic) Exposure:</b> |  |
| <b>Inhalation:</b>                              | Not Determined   |



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|                                 |                |
|---------------------------------|----------------|
| <b>Other Important Hazards:</b> | Not Determined |
|---------------------------------|----------------|

### SECTION 12 – ECOLOGICAL INFORMATION

|                                       |  |
|---------------------------------------|--|
| <b>Ecotoxicity:</b>                   | Not Determined                                 |
| <b>Persistence and Degradability:</b> | Biodegradation Product: 75% (28 d, OECD 301 D) |
| <b>Bioaccumulative Potential:</b>     | Not bioaccumulative                            |
| <b>Mobility in the Soil:</b>          | Adsorption on the floor: low                   |
| <b>Other Adverse Effects:</b>         | Not Determined                                 |

### SECTION 13 – WASTE DISPOSAL

With respect to local regulations, e.g. dispose of to suitable waste incineration plant. Waste must be disposed of in accordance with federal, provincial, state and local regulations. Empty containers must be handled with care due to product residue. **DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH AN ELECTRIC OR GAS TORCH.**

Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label. Incorrect disposal or reuse of this container is illegal and can be dangerous. Other countries: observe the national regulations.

### SECTION 14 – TRANSPORTATION INFORMATION

|                                   |                            |                              |   |
|-----------------------------------|----------------------------|------------------------------|---|
| <b>UN Number</b>                  | NA 1993                    | <b>Environmental Hazards</b> | Not Applicable  |
| <b>UN Proper Shipping Name</b>    | Combustible liquid, n.o.s. | <b>Transport in Bulk</b>     | Not Applicable  |
| <b>Transport Hazard Class(es)</b> | Non-Regulated Material     | <b>Special Precautions</b>   | The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations. |
| <b>Packing Group</b>              | Non-Regulated Material     |                              |   |

### SECTION 15 – REGULATORY INFORMATION

|   |  |                       |  |             |            |
|---|--|-----------------------|--|-------------|------------|
| <b>OSHA Information:</b>                            | This product is regulated according to OSHA. This SDS contains all the information required by OSHA. |                       |  |             |            |
| <b>TSCA Information:</b>                            | The ingredients in this product are listed on the TSCA.  |                       |  |             |            |
| <b>National Fire Protection Association (NFPA):</b> |  |                       |  |             |            |
| <b>HEALTH:</b> --                                   | <b>FLAMMABILITY:</b> 2   | <b>REACTIVITY:</b> -- | <b>SPECIAL HAZARDS:</b> Refer to Section 1 & 3 |             |            |
| <b>HAZARD SCALE:</b>                                | 0 = Minimal  | 1 = Slight            | 2 = Moderate                                   | 3 = Serious | 4 = Severe |
| <b>New Jersey Labeling Requirements:</b>            | Ingredients to be disclosed on product labeling: Refer to Section 3.                                 |                       |  |             |            |
| <b>California Proposition 65:</b>                   |  |                       |  |             |            |



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### SECTION 16 – OTHER INFORMATION

|                       |   |              |  |
|-----------------------|---|--------------|--|
| References:           | 1. Safety Data Sheets from manufacturer/supplier.         |              |  |
| <b>Abbreviations:</b> |   |              |  |
| <b>ACGIH</b>          | American Conference of Governmental Industrial Hygienists | <b>NTP</b>   | National Toxicology Program                      |
| <b>AIHA</b>           | American Industrial Hygiene Association                   | <b>OSHA</b>  | Occupational Safety and Health Administration    |
| <b>CAS</b>            | Chemical Abstract Service                                 | <b>PEL</b>   | Permissible Exposure Limit                       |
| <b>DSL</b>            | Domestic Substance List                                   | <b>STEL</b>  | Short-term Exposure Limit                        |
| <b>IARC</b>           | International Agency for Research on Cancer               | <b>TLV</b>   | Threshold Limit Value                            |
| <b>LC</b>             | Lethal Concentration                                      | <b>TSCA</b>  | Toxic Substances Control Act                     |
| <b>LD</b>             | Lethal Dosage   | <b>TWA</b>   | Time Weighted Average                            |
| <b>N/A</b>            | Not Applicable/Not Available                              | <b>WHMIS</b> | Workplace Hazardous Materials Information System |
| <b>NIOSH</b>          | National Institute for Occupational Safety and Health     |              |  |

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.