SAFETY DATA SHEET

1. Identification

Product identifier: STONETECH® KlenzAll™ Cleaner Concentrate

Other means of identification: None.

Recommended use of the chemical and restrictions on use
- **Recommended use**: Cleaner for natural stone & tile surfaces.
- **Restrictions on use**: Not available.

Details of manufacturer or importer
- **Company name**: LATICRETE International
- **Address**: 1 Laticrete Park, N Bethany, CT 06524
- **Telephone**: (203)-393-0010
- **Contact person**: Steve Fine
- **Website**: www.laticrete.com
- **Emergency phone number**: Call CHEMTREC day or night
  - USA/Canada: 1.800.424.9300
  - Mexico: 1.800.681.9531
  - Outside USA/Canada: 1.703.527.3887

Supplier
- **Company name**: LATICRETE Australia
- **Address**: P.O. Box 508 Virginia Business Mail Centre 29 Telford Street VIRGINIA QLD 4014 Australia
- **Telephone**: (61) (7) 3865-1599
- **Website**: www.laticrete.com
- **Emergency phone number**: 1.703.527.3887

2. Hazard(s) identification

Classification of the hazardous chemical
- **Physical hazards**: Not classified.
- **Health hazards**
  - Skin corrosion/irritation: Category 1B
  - Serious eye damage/eye irritation: Category 1
- **Environmental hazards**
  - Hazardous to the aquatic environment, long-term hazard: Category 3

Label elements, including precautionary statements
- **Hazard symbol(s)**
- **Signal word**: Danger
- **Hazard Statement(s)**: Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.
- **Precautionary Statement(s)**
  - **Prevention**: Do not breathe mist or vapour. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.
Response

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 CENTRE/doctor.

Storage

Store locked up.

Disposal

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

Other hazards which do not result in classification

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixture

<table>
<thead>
<tr>
<th>Identity of chemical ingredients</th>
<th>CAS number and other unique identifiers</th>
<th>Concentration of ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Aminoethanol</td>
<td>141-43-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Alcohol Ethoxylate</td>
<td>Trade Secret</td>
<td></td>
</tr>
<tr>
<td>Dipropylene glycol butyl ether</td>
<td>29911-28-2</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Ethoxylated Quaternary Amine</td>
<td>Trade Secret</td>
<td></td>
</tr>
</tbody>
</table>

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention immediately.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion

Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn’t get into the lungs. Get medical attention.

Personal protection for first-aid responders

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Symptoms caused by exposure

Permanent eye damage including blindness could result. Headaches, nausea and vomiting.

Medical attention and special treatment

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water fog. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for fire fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

Hazchem Code

2X

General fire hazards

No unusual fire or explosion hazards noted.
6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders
Use personal protection recommended in Section 8 of the SDS. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions
Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Environmental manager must be informed of all major releases.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS.

Other issues relating to spills and releases
Clean up in accordance with all applicable regulations.

7. Handling and storage

Precautions for safe handling
Avoid inhalation of vapors and contact with skin, eyes and clothing. Use with adequate ventilation. Do not taste or swallow. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Keep container tightly closed. Store in a cool and well-ventilated place. Protect from freezing. Store away from incompatible materials (See Section 10).

8. Exposure controls and personal protection

Control parameters
Follow standard monitoring procedures.

Occupational exposure limits

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Aminoethanol (CAS 141-43-5)</td>
<td>STEL</td>
<td>15 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>6 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 ppm</td>
</tr>
</tbody>
</table>

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Aminoethanol (CAS 141-43-5)</td>
<td>STEL</td>
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</tr>
<tr>
<td></td>
<td>TWA</td>
<td>6 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 ppm</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Aminoethanol (CAS 141-43-5)</td>
<td>STEL</td>
<td>6 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>3 ppm</td>
</tr>
</tbody>
</table>

UK. EH40 Workplace Exposure Limits (WELs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Aminoethanol (CAS 141-43-5)</td>
<td>STEL</td>
<td>7.6 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>3 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 ppm</td>
</tr>
</tbody>
</table>
Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Aminoethanol (CAS 141-43-5)</td>
<td>TWA</td>
<td>0.51 mg/m³</td>
<td>Vapor and aerosol.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2 ppm</td>
<td>Vapor and aerosol.</td>
</tr>
</tbody>
</table>

### Biological limit values
No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

### Individual protection measures, for example personal protective equipment (PPE)

#### Eye/face protection
Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.

#### Skin protection

- **Hand protection**: Wear appropriate chemical resistant gloves.
- **Other**: Wear appropriate chemical resistant clothing. Frequent change is advisable.

#### Respiratory protection
In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment.

#### Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

#### Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

#### Appearance
- **Physical state**: Liquid.
- **Form**: Liquid.
- **Colour**: Light yellow.
- **Odour**: Mild.

#### Odour threshold
Not available.

#### pH
11.5 - 12.5

#### Melting point/freezing point
Not available.

#### Initial boiling point and boiling range
100 °C (212 °F)

#### Flash point
does not flash

#### Evaporation rate
Not available.

#### Flammability (solid, gas)
Not available.

#### Upper/lower flammability or explosive limits
- **Flammability limit - lower (%)**: Not available.
- **Flammability limit - upper (%)**: Not available.

#### Vapour pressure
Not available.

#### Vapour density
Not available.

#### Relative density
1.003

#### Solubility(ies)
- **Solubility (water)**: Not available.

#### Partition coefficient (n-octanol/water)
Not available.

#### Auto-ignition temperature
Not available.

#### Decomposition temperature
> 200 °C (> 392 °F)

#### Viscosity
No data available.
Other physical and chemical parameters

VOC 2.8%

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerisation does not occur.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Acids. Strong oxidising agents.


11. Toxicological information

Information on possible routes of exposure

Inhalation In high concentrations, vapours may be irritating to the respiratory system.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion May cause discomfort if swallowed.

Symptoms related to exposure Permanent eye damage including blindness could result. Headaches, nausea and vomiting.

Acute toxicity May cause discomfort if swallowed.

Components Test results

<table>
<thead>
<tr>
<th>Species</th>
<th>2-Aminoethanol (CAS 141-43-5)</th>
<th>LD50 Rabbit</th>
<th>Dermal</th>
<th>1025 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LD50 Rat</td>
<td>Oral</td>
<td>1715 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Alcohol Ethoxylate (CAS Trade Secret)

Dermal LD50 Rabbit | 200 - 5000 mg/kg |

Oral LD50 Rat | 1100 mg/kg |

Ethoxylated Quaternary Amine (CAS Trade Secret)

Dermal LD50 Rat | 580 mg/kg |

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation Causes serious eye damage.

Respiratory or skin sensitisation

Respiratory sensitisation No data available.

Skin sensitisation Not a skin sensitiser.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity No data available.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

Aspiration hazard Not classified.
Chronic effects

Prolonged or repeated contact may dry skin and cause dermatitis. May cause damage to liver and kidney.

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Components | Species | Test results
---|---|---
2-Aminoethanol (CAS 141-43-5) | 
Aquatic
Algae | EC50 | Selenastrum capricornutum (new name Pseudokirchnerella subca) 2.5 mg/l, 48 hours
Crustacea | EC50 | Daphnia magna 65 mg/l, 48 hours
Fish | LC50 | Cyprinus carpio 349 mg/l, 96 hours

Persistence and degradability

The product is readily biodegradable.

Bioaccumulative potential

Not likely to bioaccumulate in aquatic organisms.

Partition coefficient

n-octanol / water (log Kow)

2-Aminoethanol (CAS 141-43-5) -1.31

Mobility in soil

No data available.

Other adverse effects

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

13. Disposal considerations

Disposal methods

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

ADG

UN number | 2491
UN proper shipping name | ETHANOLAMINE SOLUTION
Transport hazard class(es)
Class | 8
Subsidiary risk | -
Packing group | III
Environmental hazards | No
Hazchem Code | 2X
Special precautions for user | Read safety instructions, SDS and emergency procedures before handling.

RID

UN number | 2491
UN proper shipping name | ETHANOLAMINE SOLUTION
Transport hazard class(es)
Class | 8
Subsidiary risk | -
Label(s) | 8
Packing group | III
Environmental hazards | No
Special precautions for user | Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number | 2491
UN proper shipping name | Ethanolamine solution
Transport hazard class(es)

Class  8
Subsidiary risk  -
Packing group  III
Environmental hazards  No
ERG Code  8L

Special precautions for user  Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number  2491
UN proper shipping name  ETHANOLAMINE SOLUTION
Transport hazard class(es)

Class  8
Subsidiary risk  -
Packing group  III
Environmental hazards
Marine pollutant  No
EmS  F-A, S-B

Special precautions for user  Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to
Annex II of MARPOL 73/78 and the IBC Code

Not available.

General information  IATA classification is not relevant as the material is not transported by air.

15. Regulatory information

Safety, health and environmental regulations

National regulations  This Material Safety Data Sheet was prepared in accordance with the Australia National Code of Practice for the Preparation of Material Safety Data Sheets (NOHSC: 2011.)

- Australia Medicines & Poisons Appendix E
  ETHANOLAMINE, WHEN INCLUDED IN SCHEDULE 5 (CAS 141-43-5)
- Australia Medicines & Poisons Appendix F
  ETHANOLAMINE (ENTRY 2) (CAS 141-43-5)
- Australia Medicines & Poisons Schedule 4
  Ethanolamine (CAS 141-43-5)
- Australia Medicines & Poisons Schedule 5
  ETHANOLAMINE (EXCLUDING ITS SALTS AND DERIVATIVES) (CAS 141-43-5)
- Australia Medicines & Poisons Schedule 6
  ETHANOLAMINE (EXCLUDING ITS SALTS AND DERIVATIVES) (CAS 141-43-5)

High Volume Industrial Chemicals (HVIC)

- 2-Aminoethanol (CAS 141-43-5)  1000 - 9999 TONNES See the regulation for additional information.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations

Stockholm Convention

Not applicable.
Rotterdam Convention
Not applicable.

Kyoto protocol
Not applicable.

Montreal Protocol
Not applicable.

Basel Convention
Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 10-October-2016

Revision date -

Key abbreviations or acronyms used

References
HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)

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