SAFETY DATA SHEET

1. Identification

Product identifier STONETECH® Restore™ Acidic Cleaner

Other means of identification None.

Recommended use of the chemical and restrictions on use

Recommended use Acidic 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
Acute toxicity, oral Category 4
Skin corrosion/irritation Category 1B
Serious eye damage/eye irritation Category 1

Environmental hazards Not classified.

Label elements, including precautionary statements

Hazard symbol(s)

| Corrosion Exclamation mark |

Signal word Danger

Hazard Statement(s) Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.
Precautionary Statement(s)

Prevention
Do not breathe mist or vapour. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

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
Identity of chemical ingredients |CAS number and other unique identifiers| Concentration of ingredients
---|---|---
Orthophosphoric acid | 7664-38-2 | 10-20
Glycollic acid | 79-14-1 | 1-5

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
Take off immediately all contaminated clothing. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse. 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 if any discomfort continues.

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
Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

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
Alcohol resistant foam. 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
Do not breathe mist or vapour. Do not get in eyes, on skin, on clothing. Use with adequate ventilation. 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. 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>Orthophosphoric acid (CAS 7664-38-2)</td>
<td>STEL</td>
<td>3 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
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<th>Value</th>
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</table>

US. ACGIH Threshold Limit Values

<table>
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<th>Components</th>
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<th>Value</th>
</tr>
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<tr>
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<td>TWA</td>
<td>1 mg/m3</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>Orthophosphoric acid (CAS 7664-38-2)</td>
<td>STEL</td>
<td>2 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m3</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>Orthophosphoric acid (CAS 7664-38-2)</td>
<td>TWA</td>
<td>2 mg/m3</td>
<td>Inhalable fraction.</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). Face-shield. Wear a full-face respirator, if needed.

Skin protection
Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear appropriate chemical resistant clothing.

Respiratory protection
In case of insufficient ventilation, wear 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
Colourless.

Odour
Mild.
Odour threshold
Not available.

pH
< 1

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

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
1.109

Solubility(ies)
Solubility (water)
Completely soluble.

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
0 %

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
Reacts with most metals to form flammable hydrogen gas.

Conditions to avoid
Heat, flames and sparks. Contact with metals. Metals.

Incompatible materials

Hazardous decomposition products
Phosphine. Oxides of phosphorous.

11. Toxicological information

Information on possible routes of exposure

Inhalation
Causes severe respiratory tract irritation.

Skin contact
Causes severe skin burns.

Eye contact
Causes serious eye damage.

Ingestion
Harmful if swallowed.

Symptoms related to exposure
Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Acute toxicity
Harmful if swallowed.

Components | Species | Test results
--- | --- | ---
Orthophosphoric acid (CAS 7664-38-2) |  |  
**Acute**  
Dermal  
LD50 | Rabbit | 2740 mg/kg
Oral  
LD50 | Rat | 1530 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. Can cause kidney damage.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components | Species | Test results
--- | --- | ---
Orthophosphoric acid (CAS 7664-38-2) |  |  
**Aquatic**  
Fish  
LC50 | Mosquitofish (Gambusia) | 138 mg/l, 96 h

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available for this product.

Partition coefficient
Glycollic acid (CAS 79-14-1)  
-n-octanol / water (log Kow) | -1.11

Mobility in soil
Not 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 1760
UN proper shipping name Corrosive liquid, n.o.s. (Orthophosphoric acid, Glycolic acid)
Transport hazard class(es)
  - Class 8
  - Subsidiary risk -
  - Packing group II
  - Environmental hazards No
  - Hazchem Code 2X
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

UN number 1760
UN proper shipping name Corrosive liquid, n.o.s. (Orthophosphoric acid, Glycolic acid)
Transport hazard class(es)
  - Class 8
  - Subsidiary risk -
  - Label(s) 8
  - Packing group II
  - Environmental hazards No
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number 1760
UN proper shipping name Corrosive liquid, n.o.s. (Orthophosphoric acid, Glycolic acid)
Transport hazard class(es)
  - Class 8
  - Subsidiary risk -
  - Label(s) 8
  - Packing group II
  - Environmental hazards No
  - ERG Code 8L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number 1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (Orthophosphoric acid, Glycolic acid)
Transport hazard class(es)
  - Class 8
  - Subsidiary risk -
  - Packing group II
  - Environmental hazards No
  - 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

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
- Glycolic acid (CAS 79-14-1)
- Phosphoric acid (CAS 7664-38-2)

Australia Medicines & Poisons Appendix F
- Glycolic acid (CAS 79-14-1)

Australia Medicines & Poisons Schedule 5
- PHOSPHORIC ACID (EXCLUDING ITS SALTS AND DERIVATIVES) (H3PO4) (CAS 7664-38-2)

Australia Medicines & Poisons Schedule 6
- GLYCOLIC ACID (INCLUDING ITS SALTS AND ESTERS) (CAS 79-14-1)
- PHOSPHORIC ACID (EXCLUDING ITS SALTS AND DERIVATIVES) (CAS 7664-38-2)

Australia National Pollutant Inventory (NPI): Threshold quantity
- Orthophosphoric acid (CAS 7664-38-2) 10 TONNES/YR Threshold Category: 1
- Orthophosphoric acid (CAS 7664-38-2) 10000 - 99999 TONNES See the regulation for additional information.

High Volume Industrial Chemicals (HVIC)
- Orthophosphoric acid (CAS 7664-38-2) 10000 - 99999 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>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</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>Yes</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
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<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>Yes</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*“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)

**Disclaimer**

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