SAFETY DATA SHEET

1. Identification

Product identifier LATICRETE HYDRO BAN
Other means of identification None.
Recommended use of the chemical and restrictions on use
Recommended use Waterproofing Membrane.
Restrictions on use Not available.

Details of manufacturer or importer

Manufacturer
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 Not classified.
Environmental hazards Hazardous to the aquatic environment, acute hazard Category 3
Hazardous to the aquatic environment, long-term hazard Category 3

Label elements, including precautionary statements

Hazard symbol(s) None.
Signal word None.
Hazard Statement(s) Harmful to aquatic life with long lasting effects.
Precautionary Statement(s)

Prevention Observe good industrial hygiene practices.
Response No specific first aid measures noted.
Storage Store away from incompatible materials.
Disposal Dispose of waste and residues in accordance with local authority requirements.
Other hazards which do not result in classification
Not classified.

Supplemental information
None.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Identity of chemical ingredients</th>
<th>CAS number and other unique identifiers</th>
<th>Concentration of ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc oxide</td>
<td></td>
<td>1314-13-2</td>
<td>1 - 2</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td>13463-67-7</td>
<td>0.3 - 0.5</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
Wash skin with soap and water. Get medical attention if symptoms occur.

Eye contact
Flush eyes thoroughly with water for at least 15 minutes. Get medical attention if symptoms persist.

Ingestion
Rinse mouth. Do not induce vomiting. 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 include redness, itching and pain.

Medical attention and special treatment
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

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

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

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
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

Hazchem Code
None.

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
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.

Environmental precautions
Environmental manager must be informed of all major releases.
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. 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.

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>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Inhalable dust.</td>
</tr>
<tr>
<td>Zinc oxide (CAS 1314-13-2)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Inhalable dust.</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>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Insparable dust.</td>
</tr>
<tr>
<td>Zinc oxide (CAS 1314-13-2)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Insparable dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Zinc oxide (CAS 1314-13-2)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

UK. EH40 Workplace Exposure Limits (WELs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>4 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Inhalable.</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>Zinc oxide (CAS 1314-13-2)</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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

Appropriate engineering controls
Provide adequate ventilation and minimise the risk of inhalation of vapours.
Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection
Risk of contact: Wear protective gloves and goggles/face shield.

Skin protection

Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear appropriate chemical resistant clothing.

Respiratory protection
Do not breathe dust/fume/gas/mist/vapors/spray. 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
Olive green liquid.

Physical state
Liquid.

Form
Liquid.

Colour
Olive green.

Odour
Styrene butadiene rubber.

Odour threshold
Not available.

pH
8 - 9

Melting point/freezing point
0 °C (32 °F)

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

Flash point
Not available.

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
1.34

Solubility(ies)

Solubility (water)
Soluble in water.

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

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not available.

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
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
Oxidizing agents.

Hazardous decomposition products
Carbon dioxide (CO2). Carbon monoxide.
11. Toxicological information

Information on possible routes of exposure

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

**Skin contact**
May cause skin irritation.

**Eye contact**
May cause eye irritation.

**Ingestion**
May cause discomfort if swallowed.

Symptoms related to exposure:
Symptoms include redness, itching and pain.

**Acute toxicity**
May cause discomfort if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>3.43 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
May cause skin irritation on prolonged or repeated contact.

**Serious eye damage/irritation**
May cause eye irritation on direct contact.

**Respiratory or skin sensitisation**

**Respiratory sensitisation**
No data available.

**Skin sensitisation**
Not a skin sensitisier.

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

**Carcinogenicity**
Inhalation of titanium dioxide dust may cause cancer, however due to the physical form of the product,

**ACGIH Carcinogens**
Titanium dioxide (CAS 13463-67-7) A4 Not classifiable as a human carcinogen.

**IARC Monographs. Overall Evaluation of Carcinogenicity**
Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

**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**
No data available.

12. Ecological information

**Ecotoxicity**
Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc oxide (CAS 1314-13-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td>Crustacea</td>
<td>LC50</td>
</tr>
</tbody>
</table>

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

**Bioaccumulative potential**
No data available for this product.

**Mobility in soil**
The product is soluble in water.

**Other adverse effects**
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

**Disposal methods**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Residual waste
Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.

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
Not regulated as dangerous goods.

RID
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not established.

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 A
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix C
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4
Zinc oxide (CAS 1314-13-2) for human internal use Exception may apply, see the regulation for relevance.

Australia Medicines & Poisons Schedule 5
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7
Poisons schedule number not allocated.
Australia Medicines & Poisons Schedule 8
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9
Poisons schedule number not allocated.

Australia National Pollutant Inventory (NPI): Threshold quantity
- Zinc oxide (CAS 1314-13-2) 10 TONNES/YR
  Threshold Category: 1

High Volume Industrial Chemicals (HVIC)
- Titanium dioxide (CAS 13463-67-7) 100000 - 999999 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>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</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>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>

*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 15-March-2016
Revision date -
References
HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)

Disclaimer
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