SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LIME-A-WAY
Other means of identification : Not applicable.
Recommended use : Delimer
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : 0.8% - 2.3%

Company : Ecolab Co.
5105 Tomken Road
Mississauga, Ontario Canada L4W 2X5
1-800-352-5326

Emergency telephone number : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 08/06/2014

SECTION 2. HAZARDS IDENTIFICATION

Product AS SOLD
Physical and chemical hazards : Not flammable or combustible.

Potential Health Effects
Eyes : Causes serious eye damage.
Skin : Causes severe skin burns.
Ingestion : Causes digestive tract burns.
Inhalation : May cause nose, throat, and lung irritation.
Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION
Physical and chemical hazards : Not flammable or combustible.

Potential Health Effects
Eyes : Causes serious eye damage.
Skin : Causes severe skin burns.
Ingestion : Causes digestive tract burns.
Inhalation : May cause nose, throat, and lung irritation.
Chronic Exposure : Health injuries are not known or expected under normal use.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
SAFETY DATA SHEET

LIME-A-WAY

Product AS SOLD
Pure substance/mixture : Mixture

Chemical Name                     CAS-No.     Concentration: (%)
uronium hydrogen sulphate          21351-39-3 10 - 30
Urea                              57-13-6     1 - 5
oxirane, methyl-, polymer with oxirane 9003-11-6 0.1 - 1

Product AT USE DILUTION
No hazardous ingredients

SECTION 4. FIRST AID MEASURES

Product AS SOLD
In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

Product AT USE DILUTION
In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

See toxicological information (Section 11)

SECTION 5. FIREFIGHTING MEASURES

Product AS SOLD
Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
SAFETY DATA SHEET

LIME-A-WAY

Unsuitable extinguishing media : None known.

Specific hazards during firefighting : Not flammable or combustible.

Hazardous combustion products : Decomposition products may include the following materials:
- Carbon oxides
- Nitrogen oxides (NOx)
- Sulphur oxides
- Oxides of phosphorus

Special protective equipment for firefighters : Use personal protective equipment.

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Risk of explosion : Not available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. 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). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. 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). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE
**SAFETY DATA SHEET**

**LIME-A-WAY**

**Product AS SOLD**

| Advice on safe handling | Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. |
| Conditions for safe storage | Keep away from strong bases. Keep out of reach of children. Store in suitable labeled containers. |
| Storage temperature | 0 °C to 50 °C |

**Product AT USE DILUTION**

| Advice on safe handling | Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. |
| Conditions for safe storage | Keep away from strong bases. Keep out of reach of children. Store in suitable labeled containers. |

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Product AS SOLD**

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

| Engineering measures | Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards. |

**Personal protective equipment**

**Eye protection**

| Safety goggles |
| Face-shield |

**Hand protection**

| Wear the following personal protective equipment: |
| Standard glove type. |
| Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. |

**Skin protection**

| Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing |

**Respiratory protection**

| When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |

**Hygiene measures**

| Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. |

**Product AT USE DILUTION**

| Engineering measures | Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards. |

**Personal protective equipment**

**Eye protection**

| Safety goggles |
| Face-shield |
SAFETY DATA SHEET

LIME-A-WAY

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of
degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves,
safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they
must use appropriate certified respirators.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
<td>liquid</td>
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<tr>
<td>Colour</td>
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<td>Odour</td>
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SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD
Chemical stability : Stable under normal conditions.
SAFETY DATA SHEET
LIME-A-WAY

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: None known.

Incompatible materials: Bases, Metals

Hazardous decomposition products: Decomposition products may include the following materials:
- Carbon oxides
- Nitrogen oxides (NOx)
- Sulphur oxides
- Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure: Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD
- Eyes: Causes serious eye damage.
- Skin: Causes severe skin burns.
- Ingestion: Causes digestive tract burns.
- Inhalation: May cause nose, throat, and lung irritation.
- Chronic Exposure: Health injuries are not known or expected under normal use.

Product AT USE DILUTION
- Eyes: Causes serious eye damage.
- Skin: Causes severe skin burns.
- Ingestion: Causes digestive tract burns.
- Inhalation: May cause nose, throat, and lung irritation.
- Chronic Exposure: Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD
- Eye contact: Redness, Pain, Corrosion
- Skin contact: Redness, Pain, Corrosion
- Ingestion: Corrosion, Abdominal pain
- Inhalation: Respiratory irritation, Cough

Product AT USE DILUTION
- Eye contact: Redness, Pain, Corrosion
- Skin contact: Redness, Pain, Corrosion
SAFETY DATA SHEET

LIME-A-WAY

Ingestion : Corrosion, Abdominal pain
Inhalation : Respiratory irritation, Cough

Toxicity

Product AS SOLD

Acute oral toxicity : no data available
Acute inhalation toxicity : no data available
Acute dermal toxicity : no data available
Skin corrosion/irritation : no data available
Serious eye damage/eye irritation : no data available
Respiratory or skin sensitization : no data available
Carcinogenicity : no data available
Reproductive effects : no data available
Germ cell mutagenicity : no data available
Teratogenicity : no data available
STOT - single exposure : no data available
STOT - repeated exposure : no data available
Aspiration toxicity : no data available

Components

Acute oral toxicity : uronium hydrogen sulphate
LD50 rat: > 2,000 mg/kg
Urea
LD50 rat: 8,471 mg/kg

Components

Acute inhalation toxicity : Urea
4 h LC50 rat: > 2.71 mg/l
oxirane, methyl-, polymer with oxirane
4 h LC50 rat: 0.147 mg/l

Components

Acute dermal toxicity : uronium hydrogen sulphate
LD50 rabbit: > 2,000 mg/kg
Urea
LD50 rat: 8,200 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.
SAFETY DATA SHEET

LIME-A-WAY

Product
Toxicity to fish : no data available
Toxicity to daphnia and other aquatic invertebrates : no data available
Toxicity to algae : no data available

Components
Toxicity to fish : uronium hydrogen sulphate
96 h LC50 Fish : > 6,810 mg/l

Urea
96 h LC50 Fish : 127.9 mg/l

oxirane, methyl-, polymer with oxirane
96 h LC50 Fish : > 100 mg/l

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

Other adverse effects
no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD
Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Product AT USE DILUTION
Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD
The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.
SAFETY DATA SHEET

LIME-A-WAY

Land transport (TDG)
UN number : 3265
Description of the goods : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (uronium hydrogen sulphate)
Class : 8
Packing group : II
Environmentally hazardous : No

Sea Transport (IMDG/IMO)
UN number : 3265
Description of the goods : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (uronium hydrogen sulphate)
Class : 8
Packing group : II
Marine pollutant : No

Product AT USE DILUTION
Not intended for transport.

SECTION 15. REGULATORY INFORMATION

Product AS SOLD
WHMIS Classification : E Corrosive Material

Product AT USE DILUTION
WHMIS Classification : E Corrosive Material

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

The components of this product are reported in the following inventories:

1907/2006 (EU) : not determined

United States TSCA Inventory :
On TSCA Inventory

Canadian Domestic Substances List (DSL) :
All components of this product are on the Canadian DSL.

Australia. Industrial Chemical (Notification and Assessment) Act :
not determined

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand :
On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :
not determined

Japan. ISHL - Inventory of Chemical Substances (METI) :
not determined

Korea. Korean Existing Chemicals Inventory (KECI) :
not determined
SAFETY DATA SHEET

LIME-A-WAY

Philippines Inventory of Chemicals and Chemical Substances (PICCS): not determined

China Inventory of Existing Chemical Substances: not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD
NFPA:

HMIS III:

Flammability

Health

0

3

0

Instability

Special hazard.

PHYSICAL HAZARD

0

FLAMMABILITY

0

HEALTH

3

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Product AT USE DILUTION
NFPA:

HMIS III:

Flammability

Health

0

3

0

Instability

Special hazard.

PHYSICAL HAZARD

0

FLAMMABILITY

0

HEALTH

3

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Issuing date: 08/06/2014
version: 1.0
Prepared by: Regulatory Affairs 1-800-352-5326

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the MSDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.