

Material Safety Data Sheet

LIME-A-WAY

ECOLAB[®]

1. Product and company identification

Trade name of product : LIME-A-WAY

Product use : Delimer

Product dilution information : Up to 3 oz/gal or 23 ml/L in water

Supplier's information : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326

Code : 913153

Date of issue : 28-February-2012

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

2. Hazards identification

Product AS SOLD

Physical state : Liquid.

Emergency overview : DANGER !

CAUSES DIGESTIVE TRACT, EYE AND SKIN BURNS.
MAY BE HARMFUL IF SWALLOWED.

Do not ingest. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

Product AT USE DILUTION

Liquid.

CAUTION !

MAY CAUSE EYE IRRITATION.

Avoid contact with eyes. Wash thoroughly after handling.

Potential acute health effects

Product AS SOLD

Eyes : Corrosive to eyes.

Skin : Corrosive to the skin.

Inhalation : No known significant effects or critical hazards.

Ingestion : Causes burns to mouth, throat and stomach. May be harmful if swallowed.

Product AT USE DILUTION

Slightly irritating to the eyes.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

See toxicological information (Section 11)

3. Composition/information on ingredients

Product AS SOLD

Name	CAS number	% by weight
uronium hydrogen sulphate	21351-39-3	20 - 50
UREA	57-13-6	1 - 5

Product AT USE DILUTION

Name	CAS number	% by weight
uronium hydrogen sulphate	21351-39-3	<1

4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.	Rinse with water for a few minutes.
Skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
Ingestion	: If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.	Get medical attention if symptoms occur.

5. Fire-fighting measures

Product AS SOLD

Hazardous thermal decomposition products

- : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides

Fire-fighting media and instructions

- : Use an extinguishing agent suitable for the surrounding fire.

Dike area of fire to prevent runoff.

In a fire or if heated, a pressure increase will occur and the container may burst.

Special protective equipment for fire-fighters

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.	Use personal protective equipment as required.
Environmental precautions	: Avoid contact of spilled material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
Methods for cleaning up	: Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

7. Handling and storage

	Product AS SOLD
Handling	: Do not ingest. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.
Storage	: Keep out of reach of children. Keep container tightly closed. Do not store above the following temperature: 50°C

Product AT USE DILUTION
Avoid contact with eyes. Wash thoroughly after handling.
Keep out of reach of children. Store in a closed container.

8. Exposure controls/personal protection

	Product AS SOLD
Engineering measures	: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Personal protection

Eyes	: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
Hands	: Use chemical-resistant, impervious gloves.
Skin	: Use suitable protective equipment.
Respiratory	: No special protection is required.

Consult local authorities for acceptable exposure limits.

Product AT USE DILUTION
Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
No protective equipment is needed under normal use conditions.
No protective equipment is needed under normal use conditions.
No protective equipment is needed under normal use conditions.
No special protection is required.

9. Physical and chemical properties

	Product AS SOLD
Physical state	: Liquid.
Flash point	: > 100°C
Color	: Green [Dark]
Odor	: Odorless
pH	: 0.1 to 0.2 [Conc. (% w/w): 100%]
Boiling/condensation point	: 100°C (212°F)
Relative density	: 1.132 to 1.162
Solubility	: Easily soluble in the following materials: cold water and hot water.

Product AT USE DILUTION
Liquid.
> 100°C
Blue [Light]
Odorless
0.9 to 1.8

10. Stability and reactivity

Product AS SOLD

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Reactivity	: Highly reactive or incompatible with the following materials: alkalis. Slightly reactive or incompatible with the following materials: metals.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

Potential acute health effects

Product AS SOLD

Eyes : Corrosive to eyes.

Skin : Corrosive to the skin.

Inhalation : No known significant effects or critical hazards.

Ingestion : Causes burns to mouth, throat and stomach. May be harmful if swallowed.

Product AT USE DILUTION

Slightly irritating to the eyes.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity : Not reported

13. Disposal considerations

Product AS SOLD

Waste disposal : Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

RCRA classification : Unused product is D002 (Corrosive)

Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Product AS SOLD

DOT Classification UN3265

DOT Proper shipping name Corrosive liquid, acidic, organic, n.o.s. (Urea Sulfate)

Class 8

Packing group II

For transport in bulk or using IMDG regulations, see shipping documents for specific transportation information.

Product AT USE DILUTION
Not intended for transport.

15. Regulatory information

Product AS SOLD

HCS : Corrosive material

Classification

Product AT USE DILUTION
Not regulated.

Product AS SOLD

U.S. Federal regulations

TSCA 8(b) inventory : All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No listed substance

SARA 302/304 emergency planning and notification: No listed substance

SARA 313

Product name

CAS number

Concentration

Form R - Reporting requirements : No listed substance

California Prop. 65 : No listed substance

15. Regulatory information**16. Other information****Product AS SOLD**

Hazardous Material
Information System (U.S.A.) :

Health	3
Flammability	0
Physical hazards	0

National Fire Protection
Association (U.S.A.) :

**Product AT USE DILUTION**

Health	1
Flammability	0
Physical hazards	0



Date of issue : 28-February-2012
Responsible name : Regulatory Affairs
1-800-352-5326

▼ Indicates information that has changed from previously issued version.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.

Material Safety Data Sheet

SOLID POWER XL



1. Product and company identification

Trade name of product : SOLID POWER XL
Product use : Machine Warewashing Detergent

Product dilution information : Up to 0.5 oz/gal or 4 mL/L in water

Supplier's information : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326

Code : 913472

Date of issue : 04-January-2013

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

2. Hazards identification

Product AS SOLD
Physical state : Cast Solid
Emergency overview : WARNING !

CAUSES SEVERE EYE AND SKIN IRRITATION.
Untreated contact may cause severe irritation or chemical burns.
May cause burns to mouth, throat and stomach.
Do not ingest. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

Potential acute health effects

Product AS SOLD
Eyes : Severely irritating to eyes. Untreated contact may cause chemical burns.
Skin : Severely irritating to the skin. Untreated contact may cause severe irritation or chemical burns.
Inhalation : No known significant effects or critical hazards.
Ingestion : May cause burns to mouth, throat and stomach.

Product AT USE DILUTION

Liquid.
CAUTION !

MAY CAUSE EYE IRRITATION.

Avoid contact with eyes. Wash thoroughly after handling.

Product AT USE DILUTION

Moderately irritating to eyes.

Slightly irritating to the skin.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

See toxicological information (Section 11)

3. Composition/information on ingredients

Product AS SOLD

Name	CAS number	% by weight
SODIUM HYDROXIDE	1310-73-2	65
SODIUM CARBONATE	497-19-8	5 - 20
oxirane, methyl-, polymer with oxirane	9003-11-6	1 - 5
2-propenoic acid, polymer with 2,5-furandione, sodium salt	52255-49-9	1 - 5

Product AT USE DILUTION

Name	CAS number	% by weight
SODIUM HYDROXIDE	1310-73-2	<0.5

3. Composition/information on ingredients

4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.	In case of contact, immediately flush eyes with plenty of water. Remove contact lenses and flush again. Get medical attention if irritation persists.
Skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.	Rinse with water for a few minutes.
Inhalation	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
Ingestion	: If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.	Get medical attention if symptoms occur.

5. Fire-fighting measures

Product AS SOLD

Hazardous thermal decomposition products

- : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
phosphorus oxides
metal oxide/oxides

Fire-fighting media and instructions

- : Use an extinguishing agent suitable for the surrounding fire.

Dike area of fire to prevent runoff.
No specific fire or explosion hazard.

Special protective equipment for fire-fighters

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.	Use personal protective equipment as required.
Environmental precautions	: Avoid contact of spilled material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
Methods for cleaning up	: Collect spillage. Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

7. Handling and storage

Handling	Product AS SOLD	Product AT USE DILUTION
	: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.	Avoid contact with eyes. Wash thoroughly after handling.
Storage	Product AS SOLD	Product AT USE DILUTION
	: Keep out of reach of children. Keep container tightly closed. Store between the following temperatures: -10 and 50°C	Keep out of reach of children. Store in a closed container.

8. Exposure controls/personal protection

Engineering measures	Product AS SOLD	Product AT USE DILUTION
	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Personal protection		
Eyes	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions. Chemical splash goggles, impervious gloves and apron should be used when there is a likelihood of exposure to concentrated product.	No protective equipment is needed under normal use conditions.
Hands	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Skin	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Respiratory	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.	No special protection is required.

Ingredient	Exposure limits
SODIUM HYDROXIDE	ACGIH TLV (United States, 2/2010). C: 2 mg/m ³ OSHA PEL (United States, 6/2010). TWA: 2 mg/m ³ 8 hour(s). NIOSH REL (United States, 6/2009). CEIL: 2 mg/m ³

9. Physical and chemical properties

Physical state	Product AS SOLD	Product AT USE DILUTION
	: Cast Solid	Liquid.
Flash point	: > 100°C	> 100°C
Color	: White	Clear
Odor	: Odorless	Odorless
pH	: 12.5 to 12.8 [Conc. (% w/w): 1%]	10.1 to 12.6

10. Stability and reactivity

Product AS SOLD

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
- Reactivity** : Extremely reactive or incompatible with the following materials: acids.
Highly reactive or incompatible with the following materials: metals.
Reactive or incompatible with the following materials: organic materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

Potential acute health effects

Product AS SOLD

- Eyes** : Severely irritating to eyes. Untreated contact may cause chemical burns.
- Skin** : Severely irritating to the skin. Untreated contact may cause severe irritation or chemical burns.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : May cause burns to mouth, throat and stomach.

Product AT USE DILUTION

- Moderately irritating to eyes.
- Slightly irritating to the skin.
- No known significant effects or critical hazards.
- No known significant effects or critical hazards.

Product AS SOLD

Other adverse effects

- Target organs** : There is no known chronic effect after exposure to this product.

12. Ecological information

- Ecotoxicity** : Not reported

13. Disposal considerations

Product AS SOLD

- Waste disposal** : Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Product AT USE DILUTION

- Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Product AS SOLD

DOT

- DOT Classification** UN1823
- DOT Proper shipping name** Sodium hydroxide, solid mixture
- Class** 8
- Packing group** II

IMO/IMDG

- IMO/IMDG Classification** UN1823
- IMO/IMDG Proper shipping name** SODIUM HYDROXIDE, SOLID mixture
- Class** 8

14. Transport information

Packing group

II

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION

Not intended for transport.

15. Regulatory information

Product AS SOLD**HCS** : Corrosive material
Classification**Product AS SOLD****U.S. Federal regulations**

TSCA 8(b) inventory : All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No listed substance

SARA 302/304 emergency planning and notification: No listed substance

SARA 313**Product name****CAS number****Concentration**Form R - Reporting : No listed substance
requirements**California Prop. 65**

: No listed substance

Product AT USE DILUTION

Irritating material

16. Other information

Product AS SOLD**Hazardous Material** :
Information System (U.S.A.)

Health	*	2
Flammability		0
Physical hazards		0

National Fire Protection :
Association (U.S.A.)**Product AT USE DILUTION**

Health		1
Flammability		0
Physical hazards		0

Date of issue : 04-January-2013
Responsible name : Regulatory Affairs
1-800-352-5326

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Notice to reader

16. Other information

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