

# Material Safety Data Sheet

LIME-A-WAY



## 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
<b>Eye contact</b>	: 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.
<b>Skin contact</b>	: 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.
<b>Inhalation</b>	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
<b>Ingestion</b>	: 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
<b>Personal precautions</b>	: 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.
<b>Environmental precautions</b>	: 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.
<b>Methods for cleaning up</b>	: 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

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

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

## 8. Exposure controls/personal protection

	<b>Product AS SOLD</b>
<b>Engineering measures</b>	: 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

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

<b>Product AT USE DILUTION</b>
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.

Consult local authorities for acceptable exposure limits.

## 9. Physical and chemical properties

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

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

## 10. Stability and reactivity

### **Product AS SOLD**

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

**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

<u>SARA 313</u>	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
<b>Form R - Reporting requirements</b>	: 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



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 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
<b>Eye contact</b>	: 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.
<b>Skin contact</b>	: 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.
<b>Inhalation</b>	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
<b>Ingestion</b>	: 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
<b>Personal precautions</b>	: 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.
<b>Environmental precautions</b>	: 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.
<b>Methods for cleaning up</b>	: Collect spillage. Use a water rinse for final clean-up.	Use a water rinse for final clean-up.



## 7. Handling and storage

<b>Handling</b>	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
	: 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.
<b>Storage</b>	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
	: 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

<b>Engineering measures</b>	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
	: 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.
<b>Personal protection</b>		
<b>Eyes</b>	: 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.
<b>Hands</b>	: 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.
<b>Skin</b>	: 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.
<b>Respiratory</b>	: 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	<b>ACGIH TLV (United States, 2/2010).</b> C: 2 mg/m <sup>3</sup> <b>OSHA PEL (United States, 6/2010).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s). <b>NIOSH REL (United States, 6/2009).</b> CEIL: 2 mg/m <sup>3</sup>

## 9. Physical and chemical properties

<b>Physical state</b>	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
	: Cast Solid	Liquid.
<b>Flash point</b>	: > 100°C	> 100°C
<b>Color</b>	: White	Clear
<b>Odor</b>	: Odorless	Odorless
<b>pH</b>	: 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 Classification : Corrosive material

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

**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



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 1-800-352-5326

Indicates information that has changed from previously issued version.

Notice to reader

## 16. Other information

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.