

# Material Safety Data Sheet



Tri-Star L2000 XP

## 1. Product and company identification

Trade name of product : Tri-Star L2000 XP  
Product use : Laundry detergent  
Product dilution information : Up to 9 oz/50 gal or 1.8 mL/L in water

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

Code : 913099

Date of issue : 21-September-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 : Emulsion  
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 !  
No specific hazard.  
No specific hazard.

### 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

No known significant effects or critical hazards.  
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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	23
poly(oxy-1,2-ethanediyl), a-(2-propylheptyl)-w-hydroxy-alcohols, c12-16, ethoxylated	160875-66-1	5 - 20
	68551-12-2	5 - 20

### Product AT USE DILUTION

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

## 4. First aid measures

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<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.	No known effect after eye contact. 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

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides	
<b>Fire-fighting media and instructions</b>	: Use an extinguishing agent suitable for the surrounding fire.  Dike area of fire to prevent runoff. No specific fire or explosion hazard.	
<b>Special protective equipment for fire-fighters</b>	: 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

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<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>Product AT USE DILUTION</b>
<b>Handling</b>	: Do not ingest. Do not get in eyes, on skin, or on clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.	Wash thoroughly after handling.
<b>Storage</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.

## 8. Exposure controls/personal protection

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</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.	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
<b>Personal protection</b>		
<b>Eyes</b>	: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.	No protective equipment is needed under normal use conditions.
<b>Hands</b>	: Use chemical-resistant, impervious gloves.	No protective equipment is needed under normal use conditions.
<b>Skin</b>	: Use synthetic apron, other protective equipment as necessary to prevent skin contact.	No protective equipment is needed under normal use conditions.
<b>Respiratory</b>	: Wear appropriate respirator when ventilation is inadequate and occupational exposure limits are exceeded.	No special protection is required.

<b>Ingredient</b>	<b>Exposure limits</b>
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>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Physical state</b>	: Emulsion	Liquid.
<b>Flash point</b>	: > 100°C Product does not support combustion.	> 100°C
<b>Color</b>	: Blue	Colorless
<b>Odor</b>	: Faint odor	Odorless
<b>pH</b>	: 13 to 14 [Conc. (% w/w): 100%]	11 to 12
<b>Boiling/condensation point</b>	: >100°C (>212°F)	
<b>Relative density</b>	: 1.207 to 1.275	
<b>Viscosity</b>	: Dynamic: 2500 mPa·s (2500 cP)	
<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.	

## 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** : Reactive or incompatible with the following materials: acids. Slightly reactive or incompatible with the following materials: organic materials, metals and moisture.

**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

No known significant effects or critical hazards.

### Product AS SOLD

### Other adverse effects

**Target organs** : Contains material which may cause damage to the following organs: upper respiratory tract.

## 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.

**RCRA classification** : Unused product is D002 (Corrosive)

## 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** UN1824

**DOT Proper shipping name** Sodium hydroxide solution

**Class** 8

**Packing group** II

**IMO/IMDG**

**IMO/IMDG Classification** UN1824

## 14. Transport information

IMO/IMDG Proper shipping name SODIUM HYDROXIDE SOLUTION  
 Class 8  
 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  
 Target organ effects

### 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

Form R - Reporting requirements : No listed substance

California Prop. 65 : No listed substance

### Product AT USE DILUTION

Not regulated.

### CAS number      Concentration

## 16. Other information

### Product AS SOLD

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

Health	*	3
Flammability	0	
Physical hazards	0	

### Product AT USE DILUTION

Health	0
Flammability	0
Physical hazards	0

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



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Responsible name : Regulatory Affairs  
 1-800-352-5326

Indicates information that has changed from previously issued version.

## 16. Other information

### 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.