

# Material Safety Data Sheet

MONODINE



## 1. Product and company identification

Trade name of product : MONODINE

Product use : Udder wash

Product dilution information : 0.18%

Prepare the udder washing solution in plastic pails, using 1 oz Monodine to 5 U.S. gallons (1.6 mL/L) warm water (110°-115°F/43°-46°C) or use sprayer.

Supplier's information : Ecolab Inc. Food & Beverage Division  
370 N. Wabasha Street  
St. Paul, MN 55102  
1-800-392-3392

Code : 928507-16

Date of issue : 21-April-2010

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.  
CAUSES RESPIRATORY TRACT IRRITATION.  
Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing vapors, spray or mists. Keep container closed. Use only with adequate ventilation. 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** : Irritating to respiratory system.  
**Ingestion** : Causes burns to mouth, throat and stomach.

### Product AT USE DILUTION

No known significant effects or critical hazards.  
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

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
PHOSPHORIC ACID	7664-38-2	12
BUTOXYETHANOL	111-76-2	2
NONOXYNOL-12 IODINE	11096-42-7	5 - 20

### Product AT USE DILUTION

### 3. Composition/information on ingredients

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

	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.	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>	: If inhaled, remove to fresh air. Get medical attention if irritation persists.	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  
halogenated compounds

**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>Handling</b>	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b> Wash thoroughly after handling.
	: Do not ingest. Do not mix with bleach or other chlorinated products – will cause chlorine gas. Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapor or mist. Wash thoroughly after handling.	
<b>Storage</b>	<b>Product AS SOLD</b>	Keep out of reach of children.
	: Keep out of reach of children. Store in a closed container. Keep container tightly closed. Store between the following temperatures: -30 and 50°C	

## 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.
	: 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.	
<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>	: Avoid breathing vapors, spray or mists.	No special protection is required.

Ingredient	Exposure limits
PHOSPHORIC ACID	<b>ACGIH TLV (United States, 1/2009).</b> STEL: 3 mg/m <sup>3</sup> 15 minute(s). TWA: 1 mg/m <sup>3</sup> 8 hour(s).
BUTOXYETHANOL	<b>OSHA PEL (United States, 11/2006).</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s). <b>ACGIH TLV (United States, 1/2009).</b> TWA: 20 ppm 8 hour(s). <b>OSHA PEL (United States, 11/2006). Absorbed through skin.</b> TWA: 240 mg/m <sup>3</sup> 8 hour(s). TWA: 50 ppm 8 hour(s).

## 9. Physical and chemical properties

<b>Physical state</b>	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b> Liquid.
	: Liquid.	
<b>Flash point</b>	<b>Product AS SOLD</b>	> 100°C
	: > 100°C Product does not support combustion.	
<b>Color</b>	: Brown.	Colorless.
<b>Odor</b>	: iodine	Odorless.
<b>pH</b>	: 1.4 [Conc. (% w/w): 100%]	6.5
<b>Boiling/condensation point</b>	: >100°C (>212°F)	
<b>Relative density</b>	: 1.105	
<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** : Highly reactive with alkalis.  
Reactive with metals.  
Slightly reactive to reactive with organic materials.  
Do not mix with bleach or other chlorinated products – will cause chlorine gas.
- 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** : Irritating to respiratory system.
- Ingestion** : Causes burns to mouth, throat and stomach.

### Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

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: blood, kidneys, lungs, liver, lymphatic system, upper respiratory tract, central nervous system (CNS).

## 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

#### IMO/IMDG Classification

- UN number** : UN1805
- Proper shipping name** : PHOSPHORIC ACID, SOLUTION
- Class** : 8
- Packing group** : III

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

<u>SARA 313</u>	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
Form R - Reporting requirements	: 2-butoxyethanol	111-76-2	2

California Prop. 65 : No listed substance

**Product AT USE DILUTION**

Not regulated.

# 16. Other information

**Product AS SOLD**

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

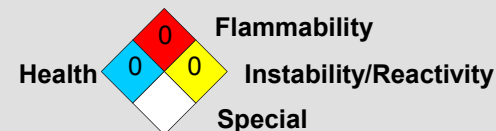
Health	*	3
Flammability		0
Physical hazards		0

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



**Product AT USE DILUTION**

Health		0
Flammability		0
Physical hazards		0



Date of issue : 21-April-2010  
Date of previous issue : No previous validation  
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.