

# Material Safety Data Sheet

MIKROKLENE



## 1. Product and company identification

Trade name of product : MIKROKLENE

Product use : Sanitizer.

Product dilution information : Not applicable

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

Code : 929422-03

Date of issue : 16-May-2011

EPA Registration No. : 1677-22

**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.  
MAY CAUSE ALLERGIC SKIN REACTION.  
HARMFUL IF ABSORBED THROUGH SKIN, SWALLOWED OR INHALED.

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.

### Potential acute health effects

#### Product AS SOLD

Eyes : Corrosive to eyes.

Skin : Corrosive to the skin. May cause sensitization by skin contact.

Inhalation : Severely irritating to the respiratory system.

Ingestion : Causes burns to mouth, throat and stomach.

See toxicological information (section 11)

### Product AT USE DILUTION

Data not available - Refer to Product AS SOLD

### Product AT USE DILUTION

Data not available - Refer to Product AS SOLD

### 3. Composition/information on ingredients

#### Product AS SOLD

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
phosphoric acid	7664-38-2	6.55
2-butoxyethanol	111-76-2	2
oxirane, methyl-, polymer with oxirane, monobutyl ether	9038-95-3	5 - 20
iodine	7553-56-2	2.00

#### Product AT USE DILUTION

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
Data not available - Refer to Product AS SOLD		

### 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.	Data not available - Refer to Product AS SOLD
<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.	
<b>Inhalation</b>	: If inhaled, remove to fresh air. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention.	
<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.	

### 5. Fire-fighting measures

#### Product AS SOLD

<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides halogenated compounds
<b>Fire-fighting media and instructions</b>	: 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.
<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>Personal precautions</b>	<b>Product AS SOLD</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.	<b>Product AT USE DILUTION</b> Data not available - Refer to Product AS SOLD
<b>Environmental precautions</b>	: Avoid contact 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.	

## 7. Handling and storage

<b>Handling</b>	<b>Product AS SOLD</b> : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or spray. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not mix with bleach or other chlorinated products - will cause chlorine gas.	<b>Product AT USE DILUTION</b> Data not available - Refer to Product AS SOLD
<b>Storage</b>	: Keep out of reach of children. Store in a closed container. Keep container tightly closed. Do not store above the following temperature: 40°C	

## 8. Exposure controls/personal protection

Product AS SOLD		Product AT USE DILUTION
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.	Data not available - Refer to Product AS SOLD
<u>Personal protection</u>		
Eyes	: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.	Data not available - Refer to Product AS SOLD
Hands	: Use chemical-resistant, impervious gloves.	
Skin	: Wear suitable protective clothing.	
Respiratory	: Wear appropriate respirator when ventilation is inadequate and occupational exposure limits are exceeded.	

Ingredient	Exposure limits

## 8. Exposure controls/personal protection

PHOSPHORIC ACID	<b>ACGIH TLV (United States, 2/2010).</b> STEL: 3 mg/m <sup>3</sup> 15 minute(s). TWA: 1 mg/m <sup>3</sup> 8 hour(s). <b>OSHA PEL (United States, 6/2010).</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s).
iodine	<b>ACGIH TLV (United States, 2/2010).</b> TWA: 0.01 ppm 8 hour(s). Form: Inhalable fraction and vapor STEL: 0.1 ppm 15 minute(s). Form: Vapor and aerosol <b>OSHA PEL (United States, 6/2010).</b> CEIL: 1 mg/m <sup>3</sup> CEIL: 0.1 ppm <b>NIOSH REL (United States, 6/2009).</b> CEIL: 0.1 ppm CEIL: 1 mg/m <sup>3</sup>
BUTOXYETHANOL	<b>ACGIH TLV (United States, 2/2010).</b> TWA: 20 ppm 8 hour(s). <b>OSHA PEL (United States, 6/2010). 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

Product AS SOLD		Product AT USE DILUTION
Physical state	: Liquid.	Data not available - Refer to Product AS SOLD
Flash point	: 93 °C (Closed cup)	
Color	: Brown [Dark]	
Odor	: Faint odor	
pH	: 1.75 [Conc. (% w/w): 100%]	
Relative density	: 1.077	

## 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. Reactive or incompatible with the following materials: metals. Slightly reactive or incompatible with the following materials: organic materials and moisture. 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. May cause sensitization by skin contact.

**Inhalation** : Severely irritating to the respiratory system.

**Ingestion** : Causes burns to mouth, throat and stomach.

#### Product AT USE DILUTION

Data not available - Refer to Product AS SOLD

#### Product AS SOLD

### Other adverse effects

**Target organs** : Contains material which causes damage to the following organs: thyroid.  
Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, lymphatic system, cardiovascular 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

Data not available - Refer to Product AS SOLD

## 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** UN1805  
**DOT Proper shipping name** Phosphoric acid solution  
**Class** 8  
**Packing group** III

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

## 15. Regulatory information

#### Product AS SOLD

**HCS Classification** : Corrosive material  
Sensitizing material  
Target organ effects

#### Product AT USE DILUTION

Data not available - Refer to Product AS SOLD

#### Product AS SOLD

### U.S. Federal regulations

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

**EPA Registration No.** : 1677-22

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

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

## 15. Regulatory information

**SARA 313****Product name****CAS number****Concentration**

Form R - Reporting requirements

: 2-butoxyethanol

111-76-2

1.8037

**California Prop. 65**

: No listed substance

## 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.)** :**Date of issue** : 16-May-2011**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.