

Material Safety Data Sheet



OXY-STEP

Section 1. Chemical product and company identification

Trade name : OXY-STEP
Product use : Veterinary cleaner
Supplier : Ecolab Inc. Food & Beverage Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-392-3392
Code : 992537-01
Date of issue : 08-December-2006

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

Section 2. Composition, information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
Hydrogen peroxide	7722-84-1	27
peracetic acid	79-21-0	6
acetic acid	64-19-7	6

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)
Emergency overview : DANGER!

CAUSES EYE AND SKIN BURNS.
HARMFUL IF SWALLOWED.
MAY BE FATAL IF INHALED OR ABSORBED THROUGH SKIN.
CAUSES RESPIRATORY TRACT IRRITATION.
OXIDIZER.
CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.

Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or mist.
Keep only in the original container. Avoid contact with combustible materials. Avoid all possible sources of ignition (spark or flame). Keep away from heat and direct sunlight.
Decomposes on heating. Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Severely irritating to the respiratory system.
Ingestion : Harmful if swallowed. Causes burns to mouth, throat and stomach.
See toxicological information (section 11)

Section 4. First aid measures

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.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion : Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire fighting measures

Flash point : > 100°C
Fire-fighting media and instructions : Use an extinguishing agent suitable for the surrounding fire.

Dike liquid for later disposal.

This material increases the risk of fire and may aid combustion. Contact with combustible material may cause fire.

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.

Section 6. Accidental release measures

Personal precautions : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

Handling : Do not ingest. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Keep only in the original container. Avoid contact with combustible materials. Wash thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Storage : Keep out of the reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition (spark or flame). Store between -30 and 35°C

Section 8. Exposure controls, personal protection

Engineering controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Provide eyewash and safety shower in area if contact or splash hazard exists.

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 synthetic apron, other protective equipment as necessary to prevent skin contact.

Respiratory : Ensure an MSHA/NIOSH-approved respirator or equivalent is used.

Name

Hydrogen peroxide

Exposure limits

ACGIH TLV (United States, 1/2006).

TWA: 1.4 mg/m³ 8 hour(s). Form: All forms

TWA: 1 ppm 8 hour(s). Form: All forms

OSHA PEL (United States, 8/1997).

TWA: 1.4 mg/m³ 8 hour(s). Form: All forms

TWA: 1 ppm 8 hour(s). Form: All forms

NIOSH REL (United States, 12/2001).

TWA: 1.4 mg/m³ 10 hour(s). Form: All forms

TWA: 1 ppm 10 hour(s). Form: All forms

acetic acid

ACGIH TLV (United States, 1/2006).

STEL: 37 mg/m³ 15 minute/minutes. Form: All forms

STEL: 15 ppm 15 minute/minutes. Form: All forms

TWA: 25 mg/m³ 8 hour(s). Form: All forms

TWA: 10 ppm 8 hour(s). Form: All forms

OSHA PEL (United States, 8/1997).

TWA: 25 mg/m³ 8 hour(s). Form: All forms
TWA: 10 ppm 8 hour(s). Form: All forms
NIOSH REL (United States, 12/2001).
STEL: 37 mg/m³ 15 minute/minutes. Form: All forms
STEL: 15 ppm 15 minute/minutes. Form: All forms
TWA: 25 mg/m³ 10 hour(s). Form: All forms
TWA: 10 ppm 10 hour(s). Form: All forms

Section 9. Physical and chemical properties

Physical state : Liquid. (Liquid.)
Color : Colorless.
Odor : Pungent.
pH : 2.1 (100%)
Boiling/condensation point : <100 °C
Specific gravity : 1.12 (Water = 1)
Dispersibility properties : Easily dispersed in cold water, hot water.
Solubility : Easily soluble in cold water, hot water.

Section 10. Stability and reactivity

Stability : The product is stable. Decomposes on heating.
Reactivity : Highly reactive with alkalis.
Slightly reactive to reactive with Organic materials, metals.
Oxygen
Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Hazardous decomposition products : Oxygen
Hazardous polymerization : Will not occur.

Section 11. Toxicological information

Potential acute health effects

Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Severely irritating to the respiratory system.
Ingestion : Harmful if swallowed. Causes burns to mouth, throat and stomach.

Potential chronic health effects

Chronic effects on humans : Contains material which causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea, teeth.

Section 12. Ecological information

Products of degradation : These products are carbon oxides (CO, CO₂) and water.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste classification : Unused product is D002 (Corrosive)

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
DOT Classification	UN3109	Organic peroxide type F, liquid (Peroxyacetic acid, Type F, stabilized)	5.2,(8)	II	Not available.

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

HCS Classification	: Oxidizing material Corrosive material Target organ effects	
U.S. Federal regulations	: SARA 302/304/311/312 extremely hazardous substances; peracetic acid SARA 302/304 emergency planning and notification; peracetic acid	
TSCA 8(b) inventory	: All materials are listed or exempt.	
<u>SARA 313</u>	<u>Product name</u>	<u>Concentration</u>
Form R - Reporting requirements:	peracetic acid	6.4
California Prop. 65	: No products were found.	

Section 16. Other information

Hazardous Material Information System (U.S.A.)	:	Health	*	3
		Fire hazard		0
		Reactivity		1
		Personal protection		H

Date of issue	: 08-December-2006.
Responsible name	: Regulatory Affairs
Date of previous issue	: 26-January-2006.

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.