

# Material Safety Data Sheet



Zep Sales & Service, A Unit of Zep Inc.  
1310 Seaboard Industrial Blvd.  
Atlanta, GA 30318  
1-877-I-BUY-ZEP (428-9937)  
www.zep.com

## Section 1. Chemical Product and Company Identification

**Product name** ZEP A.I.O. 2  
**Product use** Cleaner. Sanitizer.  
**Product code** 1309  
**Date of issue** 03/10/08      **Supersedes** 05/02/05

This product is a registered pesticide. EPA ID No. 1270-257

## Emergency Telephone Numbers

**For MSDS Information:**  
Compliance Services 1-877-I-BUY-ZEP (428-9937)

## For Medical Emergency

INFOTRAC: (877) 541-2016 Toll Free - All Calls Recorded

## For Transportation Emergency

CHEMTREC: (800) 424-9300 - All Calls Recorded  
In the District of Columbia (202) 483-7616

Printing date: 03/10/08

## Prepared By

Compliance Services  
1420 Seaboard Industrial Blvd.  
Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

**WARNING**

CAUSES EYE AND SKIN IRRITATION. HARMFUL IF SWALLOWED.

\*Hazard Determination System (HDS): Health, Flammability, Reactivity

2 0 0

**NOTE:** MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

### Acute Effects

### Routes of Entry

Dermal contact. Eye contact.

#### Eyes

Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

#### Skin

Causes skin irritation. Skin inflammation is characterized by itching, scaling, or reddening.

#### Inhalation

No data on acute toxicity of the product when inhaled.

#### Ingestion

Harmful if swallowed. Can cause gastrointestinal disturbances.

### Chronic effects

Prolonged or repeated contact may dry skin and cause irritation.

### Carcinogenicity

Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Additional Information: See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
HYDROGEN PEROXIDE; peroxide	7722-84-1	7.5
DIPROPYLENE GLYCOL N-PROPYL ETHER; 2-propanol, 1-(1-methyl-2-propoxyethoxy)	29911-27-1	1 - 10
QUATERNARY AMMONIUM CHLORIDES; blend of alkyl dimethylbenzyl ammonium chlorides, alkyl dimethyl ethylbenzyl ammonium chlorides, and ethanol	68391-01-5; 68956-79-6; 64-17-5	< 2

## Section 4. First Aid Measures

<b>Eye Contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
<b>Skin Contact</b>	Flush contaminated skin with plenty of water. Get medical attention if irritation develops.
<b>Inhalation</b>	Move exposed person to fresh air. If irritation persists, get medical attention.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

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



<b>Flash Point</b>	None.
<b>Flammable Limits</b>	Not applicable
<b>Flammability</b>	Non-combustible.
<b>Fire hazard</b>	Substance releases oxygen when heated, which may increase the severity of an existing fire. Cool closed containers exposed to fire with water. In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Fire-Fighting Procedures</b>	Use an extinguishing agent suitable for the surrounding fire. Fire-fighters should wear appropriate protective equipment. Do not release runoff from fire to sewers or waterways.

**Section 6. Accidental Release Measures**

<b>Spill Clean up</b>	Put on appropriate personal protective equipment (see section 8). Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
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**Section 7. Handling and Storage**

<b>Handling</b>	Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Do not ingest. Do not reuse container. Apply this product only as specified on the label. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed and sealed until ready for use. Keep container in a cool, well-ventilated area. Protect from temperature extremes and direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection****Product name**

HYDROGEN PEROXIDE; peroxide

**Exposure limits**

ACGIH TLV (United States).  
TWA: 1 ppm 8 hour(s).  
OSHA PEL (United States).  
TWA: 1 ppm 8 hour(s).

**Personal Protective Equipment (PPE)**

<b>Eyes</b>	Safety glasses.
<b>Body</b>	Wear appropriate protective clothing to prevent skin contact. Recommended: Rubber gloves. Neoprene gloves. Nitrile gloves. Wear apron or coverall if there is a risk of exposure to splashes.
<b>Respiratory</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid. [Thin liquid]	<b>Color</b>	Clear. Green. [Light]
<b>pH</b>	3.5-4.0	<b>Odor</b>	Pleasant.
<b>Boiling Point</b>	104.4°C (220°F)	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	1.03	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Easily soluble in the following materials: cold water and hot water.	<b>Evaporation Rate</b>	1 (Water = 1)
		<b>VOC (Consumer)</b>	1.5 (g/l). (0.15%)

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Keep away from heat and direct sunlight. Reactive or incompatible with the following materials: oxidizing materials, reducing materials and organic materials.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	carbon oxides (CO, CO <sub>2</sub> ) Exposure to sunlight accelerates decomposition.

**Section 11. Toxicological Information****Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Hydrogen Peroxide	LD50 Oral	Rat	1232 mg/kg	-
Dipropylene Glycol N-propyl Ether	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>1500 mg/kg	-
Quaternary Ammonium Chlorides	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>500 mg/kg	-

**Section 12. Ecological Information****Environmental Effects** Toxic to aquatic organisms.**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
Hydrogen Peroxide	-	Acute LC50 16.4 mg/L	Fish	96 hours
Quaternary Ammonium Chlorides	-	Acute EC50 0.058 mg/L	Daphnia	48 hours
	-	Acute LC50 0.52 mg/L	Fish - Bluegill.	96 hours

**Section 13. Disposal Considerations****Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Non-hazardous waste**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	Not a DOT controlled material (United States).	-	-	
<b>IMDG Class</b>	Not determined.			-	

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG\* : Packing group

**Section 15. Regulatory Information****U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

No products were found.

**Clean Water Act (CWA) 307:** No products were found.

**Clean Water Act (CWA) 311:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

**State Regulations****California Prop 65**

No products were found.

**Section 16. Other Information**

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

\*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.