



Zep Inc.
1310 Seaboard Industrial Blvd.
Atlanta, GA 30318
1-877-I-BUY-ZEP (428-9937)
Superior Solutions www.zep.com

Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name ZEP LEMONEX
Product use Cleaner. Disinfectant. Deodorizer
Product code 0675
Date of issue 02/27/07 **Supersedes** 08/18/04
 This product is a registered pesticide. Number: 1270-184

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: 08/01/08

Prepared By
 Compliance Services
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of hazardous ingredients	CAS #	% by Weight	Exposure Limits
SODIUM METASILICATE; silicic acid (H2-Si-O3) disodium salt; water glass	6834-92-0	<5	OSHA (United States). : 2 mg/m ³ Form: Dust
QUATERNARY AMMONIUM CHLORIDES; blend of alkyl dimethylbenzyl ammonium chlorides, alkyl dimethyl ethylbenzyl ammonium chlorides, and ethanol	68391-01-5; 68956-79-6	<5	ACGIH TLV (United States). TWA: 1000 ppm 8 hour(s). OSHA PEL (United States). TWA: 1900 mg/m ³ 8 hour(s).
TETRASODIUM ETHYLENEDIAMINE TETRAACETATE; ethylenediamine tetraacetic acid; tetrasodium salt	64-02-8	<5	Not established

Section 3. Hazards Identification

Acute Effects

Routes of Entry Dermal contact. Eye contact.

Skin Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

Eyes Direct contact with the eyes can cause irreversible damage, including blindness.

Inhalation No data on acute toxicity of the product when inhaled.

Ingestion Harmful if swallowed. May cause burns to mouth, throat and stomach.

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

HMIS

Health	2
Fire Hazard	0
Reactivity	0
Personal Protection	D

Carcinogenic Effects

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

Chronic Effects

The substance may be toxic to blood, the reproductive system, liver, upper respiratory tract, skin, eyes, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact

Check for and remove any contact lenses. In case of contact, immediately flush eyes 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. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.

Inhalation

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

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. 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

Flash Point	Not applicable.	Flammable Limits	Not applicable.
Flammability	Non-combustible.		
Fire hazard	Not applicable.		
Fire-fighting procedures	Use an extinguishing agent suitable for the surrounding fire.		

**Section 6. Accidental Release Measures**

Spill Clean up	Put on appropriate personal protective equipment (see section 8). 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

Handling	Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Wash thoroughly after handling. Product may damage or discolor vinyl such as tile, wallpaper or shower curtains unless properly diluted and rinsed promptly from these surfaces. Observe label precautions.
Storage	Keep away from incompatibles. Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep away from food, drink and animal feeding stuffs. Do not reuse product container. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection**Personal Protection**

Eyes	Splash goggles. Face shield.	Protective Clothing (Pictograms)	
Body	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.		
Respiratory	Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.		

Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Blue. Green. Clear.
pH	12.5 - 13.5	Odor	Lemon-like. Citrus
Boiling Point	101.67°C (215°F)	Vapor Pressure	Not determined.
Specific Gravity	1.08 (Water = 1)	Vapor Density	Not determined.
Solubility	Easily soluble in the following materials: cold water, hot water.	Evaporation Rate	1 compared with Water
		VOC (Consumer)	7.65 (g/l). 0.7%

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive with oxidizing agents.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂)

Section 11. Toxicological Information

Toxicity to Animals	Sodium Metasilicate: ^{25,45,50,70} ORAL (LD50): □ Acute: 1153 mg/kg [Rat]. 770 mg/kg [Mouse].
	Quaternary Ammonium Chlorides: ^{25,45,50,70} ORAL (LD50): □ Acute: >500 mg/kg [Rat]. DERMAL (LD50): □ Acute: >2000 mg/kg [Rabbit].
	Tetrasodium Ethylenediamine Tetraacetate : ^{25,45,50,70} ORAL (LD50): □ Acute: 4100 mg/kg [Rat].

Section 12. Ecological Information

Ecotoxicity	Not available.
Biodegradable/OECD	Not available.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.	Waste Stream	Code: D002 Classification: - (Hazardous waste.) Origin: - (RCRA waste.)
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Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name	None.	UN number	Not regulated.
DOT Classification	Not a DOT controlled material (United States).		

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.

TDG Classification -

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

SARA 313 toxic chemical notification and release reporting:

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: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: 1-4 dioxane

WHMIS (Canada)

Class D-1B: Material causing immediate and serious toxic effects (Toxic).

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.