

# Material Safety Data Sheet



Zep Inc.  
1310 Seaboard Industrial Blvd.  
Atlanta, GA 30318  
1-877-793-7776

## Section 1. Chemical Product and Company Identification

**Product name** E-2 HAND CLEANER  
**Product use** Hand Cleaner  
**Product code** R112  
**Date of issue** 05/20/09 **Supersedes**

### Emergency Telephone Numbers

**For MSDS Information:**  
Compliance Services 1-877-793-7776

**For Medical Emergency**  
(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

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

## Section 2. Hazards Identification

### Emergency overview

CAUTION

CAUSES EYE IRRITATION.

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



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

Not applicable.

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

**Skin** May cause slight irritation in sensitive individuals.

**Inhalation** No known acute effects of this product resulting from inhalation.

**Ingestion** No known significant effects or critical hazards.

### Chronic effects

No known chronic effects from exposure.

**Additional Information:** See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

QUATERNARY AMMONIUM CHLORIDES; blend of alkyl dimethylbenzyl ammonium chlorides, alkyl dimethyl ethylbenzyl ammonium chlorides, and ethanol 85409-23-0; 68391-01-5 <5

## Section 4. First Aid Measures

**Eye Contact** 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.

**Skin Contact** This product is formulated for use on the skin. Discontinue use if irritation and redness develop. If condition persists for more than 72 hours, consult a doctor.

**Inhalation** Inhalation not likely under normal use conditions.

**Ingestion** 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.)

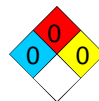
**Flash Point** Not available.

**Flammable Limits** Not available.

**Flammability** Non-combustible.

**Fire hazard** In a fire or if heated, a pressure increase will occur and the container may burst. May emit toxic fumes under fire conditions.

**Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire.



**Section 6. Accidental Release Measures**

**Spill Clean up** Stop leak if without risk. 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.

**Section 7. Handling and Storage**

**Handling** Avoid contact with eyes. Do not ingest. Wash thoroughly after handling. Do not reuse container.

**Storage** Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Protect from freezing. Keep out of the reach of children.

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

No exposure limit value known.

**Personal Protective Equipment (PPE)**

**Eyes** No special measures required.

**Body** No special measures required.

**Respiratory** No special measures required.

**Section 9. Physical and Chemical Properties**

**Physical State** Liquid. [Viscous liquid.]

**Color** Amber. [Light]

**pH** 6.5-7.5

**Odor** Odorless.

**Boiling Point** 104.44°C (220°F)

**Vapor Pressure** Not determined.

**Specific Gravity** 1

**Vapor Density** Not determined.

**Solubility** Soluble in the following materials: cold water and hot water.

**Evaporation Rate** 1 (Water = 1)

**VOC (Consumer)** 0.0%

**Section 10. Stability and Reactivity**

**Stability and Reactivity** The product is stable.

**Incompatibility** Slightly reactive or incompatible with the following materials: oxidizing materials.

**Hazardous Polymerization** Will not occur.

**Hazardous Decomposition Products** carbon oxides (CO, CO<sub>2</sub>)

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

Product/ingredient name	Result	Species	Dose	Exposure
Quaternary Ammonium Chlorides	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>500 mg/kg	-

**Section 12. Ecological Information**

**Environmental Effects** No known significant effects or critical hazards.

**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
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.