



**ZEP Manufacturing Company**  
 Acuity Specialty Products Group, Inc.  
 P.O. Box 2015  
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 1-877-I-BUY-ZEP (428-9937)  
 www.zep.com

# Material Safety Data Sheet and Safe Handling and Disposal Information

## Section 1. Chemical Product and Company Identification

**Product name** ZEP ELEC II  
**Product Use** Aerosol Electrical Contact Cleaner  
**Product Code** 0072  
**Date of issue** 05/23/05 **Supersedes** 01/04/05

**Emergency Telephone Numbers** For MSDS Information:  
 Acuity Specialty Products Group, Inc.  
 Compliance Services 1-877-I-BUY-ZEP

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

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

Printing date: 05/23/05

Prepared by Compliance Services Group  
 Acuity Specialty Products Group  
 1420 Seaboard Industrial Blvd.  
 Atlanta, GA 30318

## Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
1,1-DICHLORO-1-FLUOROETHANE; hfc141b	1717-00-6	85 - 95	Supplier Suggested (United States). TWA: 500 ppm 8 hour(s).
ETHANOL; ethyl alcohol; grain alcohol	64-17-5	<5	ACGIH TLV (United States). TWA: 1000 ppm 8 hour(s). OSHA PEL (United States). TWA: 1000 ppm 8 hour(s).

## Section 3. Hazards Identification

**Acute Effects** **Routes of Entry** Absorbed through skin. Inhalation.

**Skin** Hazardous in case of skin contact (irritant, permeator). Direct contact may cause irritation and redness. Product may be dermal absorbed. Defatting properties, may aggravate an existing dermatitis

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Inhalation** Hazardous in case of inhalation. Can cause central nervous system depression. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. May cause heart beat irregularity (arrhythmia). In confined spaces, the gas can cause asphyxiation. Medical Conditions Aggravated by Overexposure: Heart (Cardiac).

**Ingestion** May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness, and possible death.

**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	1
Reactivity	1
Personal Protection	B

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

**Chronic Effects** Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Prolonged or repeated contact may dry skin and cause irritation. The substance may be toxic to liver, heart, upper respiratory tract, central nervous system (CNS), testes. Repeated or prolonged exposure to the substance can produce target organs damage.

See Toxicological Information (section 11)

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention.
<b>Skin Contact</b>	Wash affected area with soap or mild detergent and water. Remove contaminated clothing and shoes. Get medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	Aspiration hazard if swallowed- can enter lungs and cause damage. Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head lower than hips to help prevent aspiration. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

<b>Flash Point</b>	Not applicable.	<b>Flammable Limits</b>	Not applicable.
<b>Flammability</b>	Non-flammable. (CSMA)		
<b>Fire Hazard</b>	May emit toxic fumes under fire conditions. Contents under pressure.		
<b>Fire-Fighting Procedures</b>	In case of fire, use water spray (fog), foam or dry chemicals. Wear special protective clothing and positive pressure, self-contained breathing apparatus.		

**Section 6. Accidental Release Measures**

<b>Spill Clean up</b>	Large spills are unlikely due to packaging.
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**Section 7. Handling and Storage**

<b>Handling</b>	Store and use away from heat, sparks, open flame, or any other ignition source. When heated it emits toxic fumes. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Wash thoroughly after handling. Wash contaminated clothing before reusing.
<b>Storage</b>	Keep container in a cool, well-ventilated area. Keep away from heat and direct sunlight. Do not store above 49°C (120.2°F). Keep away from incompatibles. Do not puncture or incinerate. Keep out of the reach of children.

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

	<b>Personal Protection</b>	<b>Protective Clothing (Pictograms)</b>
<b>Eyes</b>	Safety glasses.	
<b>Body</b>	Nitrile gloves.	
<b>Respiratory</b>	Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Wear appropriate respirator when ventilation is inadequate.	

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Thin liquid (Aerosol.)	<b>Color</b>	Clear.
<b>pH</b>	Not applicable	<b>Odor</b>	Faint Odor Sweetish. (Slight.)
<b>Boiling Point</b>	32.2°C (90°F)	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	1.24 (Water = 1)	<b>Vapor Density</b>	>1 (Air = 1)
<b>Solubility</b>	Very slightly soluble in cold water, hot water.	<b>Evaporation Rate</b>	>1 compared to Ether (anhydrous)
		<b>VOC (Consumer)</b>	3.0% 0.31(lb/gal) 37(g/l)

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Reactive with oxidizing agents, metals, acids, alkalis.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	Hydrogen Chloride (HCl), Hydrogen Fluoride (HF), Chlorine, Fluorine and Phosgene Gas.

**Section 11. Toxicological Information**

<b>Toxicity to Animals</b>	<b>1,1-Dichloro-1-Fluoroethane :</b>
	ORAL (LD50): Acute: >5000 mg/kg [Rat].
	DERMAL (LD50): Acute: >2000 mg/kg [Rat].
	<b>Ethanol:</b>
	ORAL (LD50): Acute: 7060 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: - (Not applicable.)  
Classification: - (Non-hazardous waste)  
Origin: - (RCRA waste.)

Consult your local or regional authorities.

**Section 14. Transport Information****Proper shipping name** Consumer Commodity**DOT Classification** ORM-D**UN number** Not regulated.

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.

**Section 15. Regulatory Information**

**U.S. Federal Regulations** SARA 313 toxic chemical notification and release reporting:  
1,1-Dichloro-1-Fluoroethane

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.*