



**ZEP Manufacturing Company**  
 Acuity Specialty Products Group, Inc.  
 P.O. Box 2015  
 Atlanta, GA 30301  
 1-877-I-BUY-ZEP (428-9937)

# Material Safety Data Sheet and Safe Handling and Disposal Information

**Section 1. Chemical Product and Company Identification**

**Product name** Zep Flush 'N Kill DM  
**Product Use** Insecticide.  
**Product Code** 0182  
**Date of issue** 08/26/04 **Supersedes** 08/28/02

This product is a registered pesticide. Number: 1270-255

**Emergency For MSDS Information:**

**Telephone Numbers** Acuity Specialty Products Group, Inc.  
**Compliance Services 1-877-I-BUY-ZEP (428-9937)**

**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: 08/30/04

**Prepared by** Compliance Services Group  
 Acuity Specialty Products Group  
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 Atlanta, GA 30318

**Section 2. Composition, Information on Ingredients**

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
BLEND OF ISOBUTANE, PROPANE, & n-BUTANE	75-28-5; 74-98-6; 106-97-8	1-10	<b>ACGIH TLV (United States).</b> TWA: 800 ppm 8 hour(s). <b>OSHA PEL (United States).</b> TWA: 1000 ppm 8 hour(s).
ISOPARAFFINIC SOLVENT; petroleum naphtha, light alkylate	64741-66-8	1-5	<b>Supplier Suggested TLV (United States).</b> TWA: 1400 mg/m <sup>3</sup> 8 hour(s).
S-Bioallethrin	28434-00-6	0.10	Not established
Ultratec AC; Deltamethrin; (s)-cyano-3-phenoxybenzyl-(1R, 3R)-3(2,2-dibromovinyl)-2,2-dimethyl-cyclopropanecarboxylic acid	52918-63-5	0.02	<b>ACGIH TLV (United States).</b> STEL: 100 mg/m <sup>3</sup> 15 minute(s). TWA: 45 mg/m <sup>3</sup> 8 hour(s).

**Section 3. Hazards Identification**

**Acute Effects** **Routes of Entry** Dermal contact. Eye contact. Inhalation.  
**Skin** Hazardous in case of skin contact (irritant). May cause allergic skin reactions with repeated exposure. Prolonged or repeated contact may dry skin and cause irritation.  
**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. Avoid breathing vapors or spray mists. Over-exposure by inhalation may cause respiratory irritation.  
**Ingestion** Unlikely in this form.

**HMIS**

Health	<b>1</b>
Fire Hazard	<b>0</b>
Reactivity	<b>0</b>
Personal Protection	<b>B</b>

**Carcinogenic Effects** Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.  
**Chronic Effects** Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation. Prolonged or repeated contact may dry skin and cause irritation.

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. Cold water may be used. Get medical attention.  
**Skin Contact** In case of contact, immediately flush skin with plenty of water. 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. 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 Method)		
<b>Fire Hazard</b>	CONTENTS UNDER PRESSURE. Keep away from heat, sparks and flame. Container explosion may occur under fire conditions or when heated.		
<b>Fire-Fighting Procedures</b>	Use DRY chemicals, CO <sub>2</sub> , water spray or foam. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. Do not release runoff from fire to sewers or waterways.		


**Section 6. Accidental Release Measures**

**Spill Clean up** Large spills are unlikely due to packaging.

**Section 7. Handling and Storage**

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapors or spray mists. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not use in and around electrical equipment due to the possibility of shock hazard. Observe label precautions.
<b>Storage</b>	CONTENTS UNDER PRESSURE. Do not puncture or incinerate. Keep away from heat and flame. Keep container in a cool, well-ventilated area. Keep out of the reach of children.

**Section 8. Exposure Controls, Personal Protection****Personal Protection****Protective Clothing (Pictograms)**

<b>Eyes</b>	Safety glasses.	
<b>Body</b>	For prolonged or repeated handling, use gloves	
<b>Respiratory</b>	Avoid breathing vapors or spray mists. Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.	

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid. (Aerosol.)	<b>Color</b>	Clear to white.
<b>pH</b>	Not determined.	<b>Odor</b>	Characteristic. (Slight.)
<b>Boiling Point</b>	100°C (212°F)	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	0.989 (Water = 1)	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Soluble in cold water, hot water.	<b>Evaporation Rate</b>	Not determined.
		<b>VOC (Consumer)</b>	86.88 (g/l). 0.72 lb/gal 8.80%

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Reactive with OXIDIZING AGENTS.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	carbon oxides (CO, CO <sub>2</sub> )

**Section 11. Toxicological Information**

<b>Toxicity to Animals</b>	<b>S-Bioallethrin:</b>
	ORAL (LD50): Acute: 412.9 mg/kg [Rat Female.], 574.5 mg/kg [Rat Male.].
	DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Toxic to aquatic organisms. Keep out of waterways. Toxic to bees. Do not use product when weather conditions allow drift from areas treated.
<b>Biodegradable/OECD</b>	Not available.

**Section 13. Disposal Considerations**

<b>Waste Information</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.	<b>Waste Stream</b>	Non-regulated waste
<b>Consult your local or regional authorities.</b>			

**Section 14. Transport Information**

<b>Proper shipping name</b>	Consumer Commodity
<b>DOT Classification</b>	ORM-D
<b>UN number</b>	Not available.

**Section 15. Regulatory Information**

<b>U.S. Federal Regulations</b>	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.

**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.*