

# 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** ZEP INSECT REPELLENT WITH DEET  
**Product use** Aerosol Insect Repellent  
**Product code** R058  
**Date of issue** 08/14/08 **Supersedes**

This product is a registered pesticide. EPA ID No. 1021-1600-1270

### Emergency Telephone Numbers

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

**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

### Prepared By

Compliance Services  
1420 Seaboard Industrial Blvd.  
Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

WARNING !

CAUSES EYE IRRITATION. HARMFUL IF SWALLOWED.  
CONTENTS UNDER PRESSURE.

\*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

Eye contact. Inhalation.

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

**Skin** No known significant effects or critical hazards. May cause allergic reactions in certain individuals.

**Inhalation** Avoid direct inhalation of spray. Over-exposure by inhalation may cause respiratory irritation.

**Ingestion** Harmful if swallowed. Can cause gastrointestinal disturbances.

### Chronic effects

Contains material which may cause damage to the following organs: kidneys, liver, ears.

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

## Section 3. Composition/Information on Ingredients

ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol	67-63-0	30 - 40
DEET; diethyltoluamide; N,N-diethyl-m-toluamide; metadelphene	134-62-3	25
HYDROCARBON PROPELLANT; blend of propane & isobutane	75-28-5; 74-98-6	15 - 25
MGK(R) 264; N-Octyl Bicycloheptene Dicarboximide	113-48-4	5
ACETONE; dimethyl ketone	67-64-1	1 - 5
DIPROPYL ISOCINCHOMERONATE	136-45-8	2.5

## 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 immediately.

**Skin Contact** This product is formulated for use on skin but should be rinsed off when possible. Get medical attention if irritation develops.

**Inhalation** Move exposed person to fresh air. If irritation persists, get medical attention.

**Ingestion** 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, the head should be kept low so that vomit does not enter the lungs. If affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

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



<b>Flash Point</b>	Not applicable
<b>Flammable Limits</b>	Not available.
<b>Flammability</b>	Extremely flammable. (CSMA Method)
<b>Fire hazard</b>	CONTENTS UNDER PRESSURE. Flammable liquid and vapor. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. In a fire or if heated, a pressure increase will occur and the container may burst. Bursting aerosol containers may be propelled from a fire at high speed.
<b>Fire-Fighting Procedures</b>	Use an extinguishing agent suitable for the surrounding fire. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion.

**Section 6. Accidental Release Measures**

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

**Section 7. Handling and Storage**

<b>Handling</b>	Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact with eyes. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wash thoroughly after handling. Apply this product only as specified on the label.
<b>Storage</b>	CONTENTS UNDER PRESSURE. Do not puncture or incinerate. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store below 120°F (49°C). Avoid all possible sources of ignition (spark or flame). Keep out of the reach of children.

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

ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol

**Exposure limits****ACGIH TLV (United States).**

TWA: 200 ppm 8 hour(s).

**OSHA PEL (United States).**

TWA: 400 ppm 8 hour(s).

**ACGIH/OSHA (United States).**

STEL: 400 ppm 15 minute(s).

HYDROCARBON PROPELLANT; blend of propane &amp; isobutane

**ACGIH TLV / OSHA PEL (United States). Notes: Propane**

TWA: 1000 ppm 8 hour(s).

**ACGIH TLV / OSHA PEL (United States).**

TWA: 750 ppm 8 hour(s).

**ACGIH / OSHA (United States).**

STEL: 1000 ppm 15 minute(s).

ACETONE; dimethyl ketone

**Personal Protective Equipment (PPE)**

<b>Eyes</b>	No special protection is required.
<b>Body</b>	No special protective clothing is required.
<b>Respiratory</b>	Avoid direct inhalation of spray. Use with adequate ventilation.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid. [Aerosol.]	<b>Color</b>	Clear.
<b>pH</b>	Not applicable	<b>Odor</b>	Mild. Characteristic.
<b>Boiling Point</b>	Not determined.	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	0.89	<b>Vapor Density</b>	>1 [Air = 1]
<b>Solubility</b>	Very slightly soluble in the following materials: cold water and hot water.	<b>Evaporation Rate</b>	<1 (Ether (anhydrous). = 1)
		<b>VOC (Consumer)</b>	555.29 (g/l). 4.63 lbs/gal 62.50%

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Keep away from heat, sparks and flame. Slightly reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> etc.)

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

Product/ingredient name	Result	Species	Dose	Exposure
Isopropyl Alcohol	LD50 Dermal	Rabbit	13000 mg/kg	-
	LD50 Oral	Rat	4700 mg/kg	-
	LC50 Inhalation Vapor	Rat	22500 ppm	8 hours
DIETHYLTOLUAMIDE	LC50 Inhalation Vapor	Rat	19000 ppm	8 hours
	LD50 Oral	Rabbit	3180 mg/kg	-
	LD50 Oral	Rat	1950 mg/kg	-
Acetone	LC50 Inhalation Vapor	Rat	5950 mg/m <sup>3</sup>	8 hours
	LD50 Dermal	Rabbit	20000 mg/kg	-
	LD50 Oral	Mouse	9750 mg/kg	-
	LC50 Inhalation Vapor	Rat	16000 ppm	4 hours

**Section 12. Ecological Information**

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

**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
DIETHYLTOLUAMIDE	-	Acute EC50 75 mg/L	Daphnia	48 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** Code: D001  
 Classification: - [Hazardous waste]  
 Origin: - [RCRA waste.]

**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not available.	Consumer commodity	ORM-D		
<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:

**Product name**

Dipropyl isocinchomeronate

**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**

**WARNING:** This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.:  
 Dipropyl isocinchomeronate

**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.