

# MATERIAL SAFETY DATA SHEET

## GUARD

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** GUARD  
**Product** **Repellent**  
**Product Use:** Insecticide.  
**Sold By:** **Continental Research Corp.**  
PO Box 15204  
St. Louis, Mo. 63110  
**Phone Number:** (800) 325-4869  
**D.O.T. Emergency Phone:** CHEM TEL (800) 255-3924

**Date of Preparation:** January 28, 2008 **Revision #:** 1.0

### Section 2: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**HMIS:** See Section 15

DANGER

EXTREMELY FLAMMABLE. TOXIC BY INHALATION.  
MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION.  
CONTENTS UNDER PRESSURE. CONTAINER MAY EXPLODE IF HEATED.

**Potential Health Effects:** See Section 11 for more information.

**Likely Routes of Exposure:** Skin contact, eye contact, inhalation, and ingestion.

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Ingestion:** Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

**Inhalation:** Toxic by inhalation. May cause respiratory tract irritation. May cause asphyxiation. This product may be aspirated into the lungs and cause chemical pneumonitis.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation.

**Signs and Symptoms:** Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Handling can cause dry skin. Vapours may cause drowsiness and dizziness.

**Medical Conditions Aggravated By Exposure:** Asthma. Allergies.

**Target Organs:** Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential Environmental Effects:** May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Isopropanol	67-63-0	15 - 40
N,N-diethyl-m-toluamide	134-62-3	10 - 30
Isobutane	75-28-5	10 - 30

# MATERIAL SAFETY DATA SHEET

## GUARD

N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	113-48-4	1 - 5
Propane	74-98-6	1 - 5
Di-n-propyl isocinchomerate	136-45-8	1 - 5

### Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water. If easy to do, remove contact lenses, if worn.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).
- Note to Physicians:** Symptoms may not appear immediately.

### Section 5: FIRE FIGHTING MEASURES

- Flammability:** Flammable by OSHA criteria.
- Means of Extinction:**
- Suitable Extinguishing Media:** Powder, water spray, foam, carbon dioxide.
  - Unsuitable Extinguishing Media:** Not available.
- Products of Combustion:** May include, and are not limited to: oxides of carbon.
- Explosion Data:**
- Sensitivity to Mechanical Impact:** Not available.
  - Sensitivity to Static Discharge:** Not available.
- Protection of Firefighters:** Containers may explode when heated. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

### Section 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ruptured cylinders may rocket.
- Environmental Precautions:** Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). This material is a water pollutant. Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
- Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for Clean-Up:** Vacuum or sweep material and place in a disposal container. Allow gas to dissipate harmlessly into the atmosphere.
- Other Information:** Not available.

# MATERIAL SAFETY DATA SHEET

## GUARD

### Section 7: HANDLING AND STORAGE

**Handling:**

Keep away from sources of ignition. - No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. When using, do not eat or drink. Wash hands before eating, drinking, or smoking.

**Storage:**

Keep out of the reach of children. Keep container in a well-ventilated place. Do not store at temperatures above 49°C / 120°F.

### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Isopropanol	400 ppm	200 ppm
N,N-diethyl-m-toluamide	Not available.	Not available.
Isobutane	Not available.	Not available.
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	Not available.	Not available.
Propane	1000 ppm	1000 ppm
Di-n-propyl isocinchomeronate	Not available.	Not available.

**Engineering Controls:** Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

**Personal Protective Equipment:**

**HMIS:** See Section 15

**Eye/Face Protection:** Wear eye/face protection.

**Hand Protection:** Wear suitable gloves.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear.
<b>Color:</b>	Straw.
<b>Odour:</b>	Sweet / Solvent.
<b>Odour Threshold:</b>	Not available.
<b>Physical State:</b>	Gas/Pressurized Liquid.
<b>pH:</b>	Not applicable.
<b>Viscosity:</b>	Not available.
<b>Freezing Point:</b>	Not available.
<b>Boiling Point:</b>	Not available.
<b>Flash Point:</b>	Not available.

# MATERIAL SAFETY DATA SHEET

## GUARD

<b>Evaporation Rate:</b>	Not available.
<b>Lower Flammability Limit:</b>	Not available.
<b>Upper Flammability Limit:</b>	Not available.
<b>Vapor Pressure:</b>	Not available.
<b>Vapor Density:</b>	Not available.
<b>Specific Gravity:</b>	0.873 (Liquid Concentrate)
<b>Solubility in Water:</b>	Partial.
<b>Coefficient of Water/Oil Distribution:</b>	Not available.
<b>Auto-ignition Temperature:</b>	Not available.
<b>Percent Volatile, wt. %:</b>	Not available.
<b>VOC content, wt. %:</b>	65.0% (US federal/CARB/OTC/LADCO)

### Section 10: STABILITY AND REACTIVITY

**Stability:** Stable under normal storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Keep in a cool place.

**Conditions of Reactivity:** Heat. Incompatible materials.

**Incompatible Materials:** Oxidizers. Anhydride and isocyanates. Plastics. Acetate. Rayon.

**Hazardous Decomposition Products:** May include, and are not limited to: oxides of carbon.

**Possibility of Hazardous Reactions:** No dangerous reaction known under conditions of normal use.

### Section 11: TOXICOLOGY INFORMATION

#### EFFECTS OF ACUTE EXPOSURE

##### Component Analysis

<b>Ingredient</b>	<b>LD<sub>50</sub> (oral)</b>	<b>LC<sub>50</sub></b>
Isopropanol	5045 mg/kg, rat	16970 ppm 4 hrs, rat
N,N-diethyl-m-toluamide	1950 mg/kg, rat	5950 mg/m <sup>3</sup> , rat
Isobutane	Not available.	Not available.
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	2800 mg/kg, rat	Not available.
Propane	Not available.	Not available.
Di-n-propyl isocinchomeronate	5230 mg/kg, rat	Not available.

**Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Skin:** May cause skin irritation. Handling can cause dry skin.

**Ingestion:** Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

**Inhalation:** Toxic by inhalation. May cause respiratory tract irritation. May cause asphyxiation. This product may be aspirated into the lungs and cause chemical pneumonitis. Vapours may cause drowsiness and dizziness.

# MATERIAL SAFETY DATA SHEET

## GUARD

### EFFECTS OF CHRONIC EXPOSURE

**Target Organs:** Not available.

**Chronic Effects:** (Effects due to excessive exposure to the raw materials of this mixture) May cause liver or kidney damage (lab animal data). May cause skin sensitization.

**Carcinogenicity:** Hazardous by OSHA criteria.

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen *
Isopropanol	G-A4
N,N-diethyl-m-toluamide	Not listed.
Isobutane	Not listed.
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	Not listed.
Propane	Not listed.
Di-n-propyl isocinchomeronate	CP65

\* See Section 15 for more information.

**Mutagenicity:** Not hazardous by OSHA criteria.

**Reproductive Effects:** Not hazardous by OSHA criteria.

#### Developmental Effects:

**Teratogenicity:** Not hazardous by OSHA criteria.

**Embryotoxicity:** Not hazardous by OSHA criteria.

**Respiratory Sensitization:** Not hazardous by OSHA criteria.

**Skin Sensitization:** Not hazardous by OSHA criteria.

**Toxicologically Synergistic Materials:** Not available.

### Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** May cause long-term adverse effects in the aquatic environment

**Persistence / Degradability:** Not available.

**Bioaccumulation / Accumulation:** Not available.

**Mobility in Environment:** Not available.

### Section 13: DISPOSAL CONSIDERATIONS

#### Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

### Section 14: TRANSPORTATION INFORMATION

#### DOT Classification

ORM-D

#### TDG Classification

Limited Quantity

# MATERIAL SAFETY DATA SHEET

## GUARD

<b>Section 15: REGULATORY INFORMATION</b>
---

### Federal Regulations

**Canadian:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**US:** MSDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200).

### SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Isopropanol	Not listed.	Not listed.	Not listed.	Yes.
N,N-diethyl-m-toluamide	Not listed.	Not listed.	Not listed.	Not listed.
Isobutane	Not listed.	Not listed.	Not listed.	Not listed.
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	Not listed.	Not listed.	Not listed.	Not listed.
Propane	Not listed.	Not listed.	Not listed.	Not listed.
Di-n-propyl isocinchomeronate	Not listed.	Not listed.	Not listed.	313

### State Regulations

#### California Proposition 65:

This product contains a chemical known to the state of California to cause cancer.

### Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
Isopropanol	DSL	Yes.
N,N-diethyl-m-toluamide	DSL	Yes.
Isobutane	DSL	Yes.
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	DSL	Yes.
Propane	DSL	Yes.
Di-n-propyl isocinchomeronate	DSL	No.

### HMIS - Hazardous Materials Identification System

Health - 2      Flammability - 3      Physical Hazard - 0      PPE - B

### NFPA - National Fire Protection Association:

Health - 2      Fire - 3      Reactivity - 0

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

### WHMIS Classification(s):

Exempt under WHMIS.

