## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME**
RID REPELLENT TROPICAL STRENGTH PUMP SPRAY

**SYNONYMS**
"403100 100ml Pump Spray APN 9311037431004"

**PROPER SHIPPING NAME**
ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

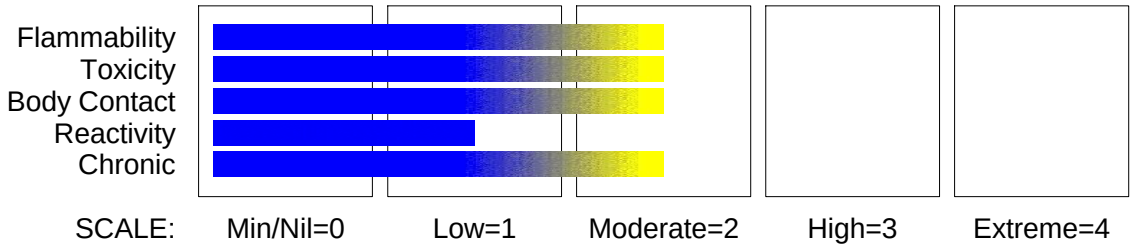
**PRODUCT USE**
■ Used according to manufacturer's directions.
Personal insecticide sprayed onto skin from a pump pack.

**SUPPLIER**
Company: RID (Australia)
Address:
79 Denham Street
Townsville
QLD, 4810
Australia
Telephone: +61 7 4772 1411
Fax: +61 7 4721 3892

## Section 2 - HAZARDS IDENTIFICATION

**STATEMENT OF HAZARDOUS NATURE**
**HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.**

**CHEMWATCH HAZARD RATINGS**




**RISK**

| Risk Codes | Risk Phrases |
|---|---|
| R10 | • Flammable. |
| R36 | • Irritating to eyes. |

**SAFETY**

| Safety Codes | Safety Phrases |
|---|---|
| S25 | • Avoid contact with eyes. |
| S39 | • Wear eye/face protection. |
| S40 | • To clean the floor and all objects contaminated by this material, use water. |
| S26 | • In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre. |
| S46 | • If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label). |
| S60 | • This material and its container must be disposed of as hazardous waste. |

**continued...**

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| NAME | CAS RN | % |
|---|---|---|
| ethanol | 64-17-5 | 30-60 |
| N, N- diethyl- m- toluamide | 134-62-3 | 19 |
| ingredients determined not to be hazardous [Mfr] | | 0.2-10 |
| water | 7732-18-5 | balance |

## Section 4 - FIRST AID MEASURES

**SWALLOWED**
■ - If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

**EYE**
■ If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**SKIN**
■ If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

**INHALED**
■ - If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

**NOTES TO PHYSICIAN**
■ For acute or short term repeated exposures to ethanol:
- Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
- Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
- Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
- Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.

## Section 5 - FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA**
■ - Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
Do not use a water jet to fight fire.

**FIRE FIGHTING**
■ - Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

**continued...**

**FIRE/EXPLOSION HAZARD**
■ - Liquid and vapour are flammable.
- Moderate fire hazard when exposed to heat or flame.
- Vapour forms an explosive mixture with air.
- Moderate explosion hazard when exposed to heat or flame.
Combustion products include: carbon dioxide (CO2), carbon monoxide (CO), nitrogen oxides (NOx), other pyrolysis products typical of burning organic material.

**FIRE INCOMPATIBILITY**
■ - Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

**HAZCHEM**
•2Y

## Section 6 - ACCIDENTAL RELEASE MEASURES

**MINOR SPILLS**
■ - Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

**MAJOR SPILLS**
■ - Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.

**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

## Section 7 - HANDLING AND STORAGE

**PROCEDURE FOR HANDLING**
■ - Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

**SUITABLE CONTAINER**
■ - Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.
- For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C)
- For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)
- Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.

**STORAGE REQUIREMENTS**
■ - Store in original containers in approved flammable liquid storage area.
- Store away from incompatible materials in a cool, dry, well-ventilated area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.

**continued...**

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE CONTROLS**

| Source | Material | TWA ppm | Notes |
|---|---|---|---|
| Australia Exposure Standards | (Ethyl alcohol) | 1000 | American Conference of Governmental Industrial Hygienists (ACGIH)4, 5 is the documentation source |

The following materials had no OELs on our records
• N, N- diethyl- m- toluamide: CAS:134- 62- 3
• water: CAS:7732- 18- 5

**MATERIAL DATA**
ETHANOL:
N,N-DIETHYL-M-TOLUAMIDE:
RID REPELLENT TROPICAL STRENGTH PUMP SPRAY:
■ Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.

ETHANOL:
RID REPELLENT TROPICAL STRENGTH PUMP SPRAY:
■ For ethanol:
Odour Threshold Value: 49-716 ppm (detection), 101 ppm (recognition)
Eye and respiratory tract irritation do not appear to occur at exposure levels of less than 5000 ppm and the TLV-TWA is thought to provide an adequate margin of safety against such effects. Experiments in man show that inhalation of 1000 ppm caused slight symptoms of poisoning and 5000 ppm caused strong stupor and morbid sleepiness.

WATER:
■ No exposure limits set by NOHSC or ACGIH.

**PERSONAL PROTECTION**

**RESPIRATOR**
•Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

**EYE**
■ - Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

**HANDS/FEET**
■ - Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber.
The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

**OTHER**
■ - Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.

**continued...**

- Eyewash unit.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets), non sparking safety footwear.

**ENGINEERING CONTROLS**
■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
The basic types of engineering controls are:
Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE**
Clear flammable liquid with a mild odour - when delivered as a spray it is a fine clear spray.

**PHYSICAL PROPERTIES**
Liquid.
Mixes with water.

| | | | |
|---|---|---|---|
| State | Liquid | Molecular Weight | Not Applicable |
| Melting Range (℃) | Not Available | Viscosity | Not Available |
| Boiling Range (℃) | 65 (initial) | Solubility in water (g/L) | Mi scible |
| Flash Point (℃) | 50 approx | pH (1% solution) | Not Available |
| Decomposition Temp (℃) | Not Available | pH (as supplied) | Not A vailable |
| Autoignition Temp (℃) | Not Available | Vapour Pressure (kPa) | Not Available |
| Upper Explosive Limit (%) | Not Available | Specific Gravity (water=1) | 0.93 |
| Lower Explosive Limit (%) | Not Available | Relative Vapour Density (air=1) | Not Available |
| Volatile Component (%vol) | 60- 80 | Evaporation Rate | Not Available |

## Section 10 - STABILITY AND REACTIVITY

**CONDITIONS CONTRIBUTING TO INSTABILITY**
■ - Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.
*For incompatible materials - refer to Section 7 - Handling and Storage.*

## Section 11 - TOXICOLOGICAL INFORMATION

**POTENTIAL HEALTH EFFECTS**

**ACUTE HEALTH EFFECTS**

**SWALLOWED**
■ Accidental ingestion of the material may be damaging to the health of the individual.
Ingestion of ethanol (ethyl alcohol, "alcohol") may produce nausea, vomiting, bleeding from the digestive tract, abdominal pain, and diarrhoea. Effects on the body:

| Blood concentration | Effects |
|---|---|
| <1.5 g/L | Mild: impaired vision, co- ordination and reaction time; emotional instability |

**continued...**

| | |
|---|---|
| 1.5- 3.0 g/L | Moderate: Slurred speech, confusion, inco-ordination, emotional instability, disturbances in perception and senses, possible blackouts, and impaired objective performance in standardized tests. Possible double vision, flushing, fast heart rate, sweating and incontinence. Slow breathing may occur rarely and fast breathing may develop in cases of metabolic acidosis, low blood sugar and low blood potassium. Central nervous system depression may progress to coma. |
| 3- 5 g/L | Severe: cold clammy skin, low body temperature and low blood pressure. Atrial fibrillation and heart block have been reported. Depression of breathing may occur, respiratory failure may follow serious poisoning, choking on vomit may result in lung inflammation and swelling. Convulsions due to severe low blood sugar may also occur. Acute liver inflammation may develop. |

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**EYE**
■ There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. There may be damage to the cornea. Unless treatment is prompt and adequate there may be permanent loss of vision. Conjunctivitis can occur following repeated exposure.

**SKIN**
■ There is some evidence to suggest that the material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
Application of Deet to the skin produces no primary skin irritation or sensitisation in humans. In rabbits, redness and peeling of the skin have been observed as well as intoxication, excitation, stiffness and loss of co-ordination. Harm to the foetus has been reported following application of large doses.
Open cuts, abraded or irritated skin should not be exposed to this material.

**INHALED**
■ Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.
There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.
Animal testing shows that the most common signs of inhalation overdose is inco-ordination and drowsiness.

**CHRONIC HEALTH EFFECTS**
■ Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
Based on experience with similar materials, there is a possibility that exposure to the material may reduce fertility in humans at levels which do not cause other toxic effects.
Exposure to DEET is usually by inhaling mists or vapours, or through skin contact/absorption.
Repeated exposure to DEET can cause slight irritation and dryness of the face, sloughing around the nose and a tingling sensation. Some individuals have shown nervous system symptoms (muscle cramp, urinary hesitation, difficulty sleeping, abnormal sweating, irritability, depression, paranoia, confusion and aggressive behaviour) and brain disease. Allergy and scarring skin inflammation have been reported; in one case, a 5-year-old girl died, likely as a result of sensitisation to DEET.
Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents.
Large amounts of ethanol taken in pregnancy may result in "foetal alcohol syndrome", characterised by delay in mental and physical development, learning difficulties, behavioural problems and small head size. A small number of people develop allergic reactions to ethanol, which include eye infections, skin swelling, shortness of breath, and itchy rashes with blisters.

**TOXICITY AND IRRITATION**
■ No significant acute toxicological data identified in literature search.
The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

**SKIN**

**continued...**

| | | | |
|---|---|---|---|
| ethanol | GESAMP/EHS Composite List - GESAMP Hazard Profiles | D1: skin irritation/corrosion | 1 |

## Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

**Ecotoxicity**

| Ingredient | Persistence: Water/Soil | Persistence: Air | Bioaccumulation | Mobility |
|---|---|---|---|---|
| ethanol | LOW | MED | LOW | HIGH |
| N, N- diethyl- m- toluamide | HIGH | No Data Available | LOW | MED |

## Section 13 - DISPOSAL CONSIDERATIONS

■ Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.
A Hierarchy of Controls seems to be common - the user should investigate:
- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

## Section 14 - TRANSPORTATION INFORMATION

Labels Required: FLAMMABLE LIQUID

**HAZCHEM:**
•2Y (ADG7)

**ADG7:**

| | | | |
|---|---|---|---|
| Class or Division: | 3 | Subsidiary Risk: | None |
| UN No.: | 1170 | Packing Group: | III |
| Special Provision: | 144 223 | Limited Quantity: | 5 L |
| Portable Tanks & Bulk Containers - Instruction: | T2 | Portable Tanks & Bulk Containers - Special Provision: | TP1 |
| Packagings & IBCs - Packing Instruction: | P001 IBC03 LP01 | Packagings & IBCs - Special Packing Provision: | None |

Name and Description: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

**Air Transport IATA:**

| | | | |
|---|---|---|---|
| ICAO/IATA Class: | 3 | ICAO/IATA Subrisk: | None |
| UN/ID Number: | 1170 | Packing Group: | III |
| Special provisions: Cargo Only | A3 | | |
| Packing Instructions: Passenger and Cargo | 366 | Maximum Qty/Pack: Passenger and Cargo | 220 L |
| Packing Instructions: Passenger and Cargo Limited Quantity | 355 | Maximum Qty/Pack: Passenger and Cargo Limited Quantity | 60 L |
| Packing Instructions: | Y344 | Maximum Qty/Pack: | 10 L |

Shipping name:ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

**continued...**

**Maritime Transport IMDG:**

| | | | |
|---|---|---|---|
| IMDG Class: | 3 | IMDG Subrisk: | None |
| UN Number: | 1170 | Packing Group: | III |
| EMS Number: | F- E, S- D | Special provisions: | 144 223 |
| Limited Quantities: | 5 L | | |

Shipping name:ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

## Section 15 - REGULATORY INFORMATION

**Indications of Danger:**
Xi Irritant

POISONS SCHEDULE None

**REGULATIONS**

**Regulations for ingredients**

**ethanol (CAS: 64-17-5) is found on the following regulatory lists;**
"Acros Transport Information","Australia Exposure Standards","Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions","Australia Inventory of Chemical Substances (AICS)","FisherTransport Information", "International Air Transport Association (IATA) Dangerous Goods Regulations","IOFI Global Reference List of Chemically Defined Substances","Sigma-AldrichTransport Information","World Anti-Doping Agency - The 2009 Prohibited List World Anti-Doping Code - Substances Prohibited in Particular Sports (French)","World Anti-Doping Agency - The 2012 Prohibited List World Anti-Doping Code - Substances Prohibited in Particular Sports"

**N,N-diethyl-m-toluamide (CAS: 134-62-3) is found on the following regulatory lists;**
"Australia Australian Pesticides and Veterinary Medicines Authority (APVM) Record of approved active constituents","Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions","Australia Inventory of Chemical Substances (AICS)","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5","Sigma-AldrichTransport Information"

**water (CAS: 7732-18-5) is found on the following regulatory lists;**
"Australia Inventory of Chemical Substances (AICS)","Sigma-AldrichTransport Information"

**No data for (CW: 36-6830)**

## Section 16 - OTHER INFORMATION

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.



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*This is the end of the MSDS.*