

Outdoors Insect Repellent Pump Spray 100ml

RID Australia

Chemwatch Hazard Alert Code: 2

Chemwatch: **5322-36** Version No: **2.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

Issue Date: **11/09/2018**Print Date: **11/09/2018**S.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

| Product name | Outdoors Insect Repellent Pump Spray 100ml | |
|-------------------------------|--|--|
| Synonyms | 938100 Pump Spray 100ml APVMA 53405/116095 | |
| Proper shipping name | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) | |
| Other means of identification | Not Available | |

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Use according to manufacturer's directions.

Personal insecticide sprayed onto skin from a pump pack.

Details of the supplier of the safety data sheet

| Registered company name | RID Australia |
|-------------------------|--|
| Address | 79 Denham Street Townsville QLD 4810 Australia |
| Telephone | +61 7 4772 1411 |
| Fax | +61 7 4721 3892 |
| Website | Not Available |
| Email | Not Available |

Emergency telephone number

| Association / Organisation | Not Available |
|-----------------------------------|-----------------|
| Emergency telephone numbers | +61 7 4772 1411 |
| Other emergency telephone numbers | Not Available |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

| | Min | Max | |
|--------------|-----|-----|-------------------------|
| Flammability | 2 | | ! |
| Toxicity | 1 | | 0 = Minimum |
| Body Contact | 2 | | 1 = Low 2 = Moderate |
| Reactivity | 1 | | 3 = High |
| Chronic | 0 | | 4 = Extreme |

| Poisons Schedule | Not Applicable | |
|--------------------|---|--|
| Classification [1] | Flammable Liquid Category 3, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A | |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI | |

Label elements

Hazard pictogram(s)





SIGNAL WORD

WARNING

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Hazard statement(s)

| H226 | Flammable liquid and vapour. |
|------|--------------------------------|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

| P210 | Keep away from heat/sparks/open flames/hot surfaces No smoking. | |
|------|---|--|
| P233 | Keep container tightly closed. | |
| P240 | Ground/bond container and receiving equipment. | |
| P241 | Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment. | |

Precautionary statement(s) Response

| P362 | Take off contaminated clothing and wash before reuse. | |
|----------------|--|--|
| P370+P378 | In case of fire: Use alcohol resistant foam or normal protein foam for extinction. | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | |
| P337+P313 | If eye irritation persists: Get medical advice/attention. | |

Precautionary statement(s) Storage

P403+P235 Store in a well-ventilated place. Keep cool.

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|----------|-----------|--|
| 64-17-5 | 30-60 | ethanol |
| 134-62-3 | 10-30 | N,N-diethyl-m-toluamide |
| | | Ingredients determined not to be hazardous |

SECTION 4 FIRST AID MEASURES

Description of first aid measures

| Eye Contact | 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 Contact | Intended for application to skin. Remove with soap and water if irritation occurs. Seek medical advice if irritation persists. |
| Inhalation | If furnes 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. Transport to hospital, or doctor. |
| Ingestion | 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. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. |

Indication of any immediate medical attention and special treatment needed

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.
- Fructose administration is contra-indicated due to side effects.

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SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Alcohol stable foam.
- ► Dry chemical powder.
- ▶ BCF (where regulations permit).
- Carbon dioxide.

Do not use a water jet to fight fire.

Special hazards arising from the substrate or mixture

| Fire Incompatibility | ► Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result | | |
|-------------------------|---|--|--|
| Advice for firefighters | | | |
| 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. | | |
| 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) nitrogen oxides (NOx) other pyrolysis products typical of burning organic material. | | |
| HAZCHEM | •2Y | | |

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

| 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 SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe 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 Safe handling ► 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. Store away from incompatible materials in a cool, dry, well-ventilated area. Other information ▶ DO NOT store in pits, depressions, basements or areas where vapours may be trapped. ▶ No smoking, naked lights, heat or ignition sources.

Conditions for safe storage, including any incompatibilities

| 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. |
|-------------------------|---|
| Storage incompatibility | Avoid reaction with oxidising agents, bases and strong reducing agents. |

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- Must not be stored together
- May be stored together with specific preventions
- May be stored together

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|------------------------------|------------|---------------|-----------------------|---------------|---------------|---------------|
| Australia Exposure Standards | ethanol | Ethyl alcohol | 1000 ppm / 1880 mg/m3 | Not Available | Not Available | Not Available |

EMERGENCY LIMITS

| Ingredient | Material name | | TEEL-1 | | TEEL-2 | TEEL-3 |
|-------------------------|--------------------------|---------------|---------------|--------------|---------------|-----------|
| ethanol | Ethyl alcohol; (Ethanol) | | Not Available | | Not Available | 15000 ppm |
| Ingredient | Original IDLH | Original IDLH | | Revised IDLH | | |
| ethanol | 3,300 ppm Not Available | | 3,300 ppm | | | |
| N,N-diethyl-m-toluamide | Not Available | Not Available | | Not Availa | ble | |

Exposure controls

Appropriate 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.

Personal protection











Eye and face protection

- ► 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 lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

- ► Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

Hands/feet protection

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.

Personal hygiene is a key element of effective hand care.

Body protection

See Other protection below

- Overalls.PVC Apron.
- ▶ PVC protective suit may be required if exposure severe.

Other protection

- 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 or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot an shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

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| Material | СРІ |
|----------|-----|
| BUTYL | Α |
| NEOPRENE | Α |

Respiratory protection

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum | Half-Face | Full-Face | Powered Air |
|-------------------|------------|------------|---------------|
| Protection Factor | Respirator | Respirator | Respirator |
| up to 5 x ES | Air-line* | A-2 P2 | A-PAPR-2 P2 ^ |

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| NATURAL RUBBER | С |
|------------------|---|
| NATURAL+NEOPRENE | С |
| NITRILE | С |
| NITRILE+PVC | С |
| PE/EVAL/PE | С |
| PVA | С |
| PVC | С |
| VITON | С |

^{*} CPI - Chemwatch Performance Index

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

| up to 10 x ES | - | A-3 P2 | - |
|---------------|---|------------|---|
| 10+ x ES | - | Air-line** | - |

^{* -} Continuous Flow; ** - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Appearance | Clear flammable liquid with a mild odour - when delivered as a spray it is a fine clear spray. | | | | |
|--|--|---|----------------|--|--|
| Physical state | Liquid | Relative density (Water = 1) | 0.93 | | |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available | | |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available | | |
| pH (as supplied) | Not Available | Decomposition temperature | Not Available | | |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available | | |
| Initial boiling point and boiling range (°C) | 65 (initial) | Molecular weight (g/mol) | Not Applicable | | |
| Flash point (°C) | 50 approx | Taste | Not Available | | |
| Evaporation rate | Not Available | Explosive properties | Not Available | | |
| Flammability | Flammable. | Oxidising properties | Not Available | | |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available | | |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | 60-80 | | |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available | | |
| Solubility in water (g/L) | Miscible | pH as a solution (1%) | Not Available | | |
| Vapour density (Air = 1) | Not Available | VOC g/L | 505.24 | | |

SECTION 10 STABILITY AND REACTIVITY

| Reactivity | See section 7 |
|------------------------------------|--|
| Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

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.

Inhaled

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.

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

^{^ -} Full-face

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Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage 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 Mild: impaired vision, co-ordination and <1.5 a/L reaction time; emotional instability Moderate: Slurred speech, confusion. inco-ordination, emotional instability, Ingestion disturbances in perception and senses, possible blackouts, and impaired objective performance in standardized 1.5-3.0 g/L 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. This material can cause inflammation of the skin on contact in some persons. 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 **Skin Contact** 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 There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe Eve inflammation may be expected with pain Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. 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 Chronic 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. 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 IRRITATION TOXICITY **Outdoors Insect Repellent** Pump Spray 100ml Not Available Not Available IRRITATION TOXICITY Dermal (rabbit) LD50: 17100 mg/kg^[1] Eye (rabbit): 500 mg SEVERE Inhalation (rat) LC50: 63926.976 mg/l/4h $^{\left[2\right]}$ Eye (rabbit):100mg/24hr-moderate ethanol Oral (rat) LD50: 7060 mg/kg^[2] Skin (rabbit):20 mg/24hr-moderate Skin (rabbit):400 mg (open)-mild TOXICITY IRRITATION dermal (rat) LD50: 5000 $\mathrm{mg/kg}^{[2]}$ Eye (rabbit): 10 mg - moderate N,N-diethyl-m-toluamide Oral (rat) LD50: 1800 mg/kg^[2] Eve (rabbit): 100 mg Skin (rabbit): 500 mg - moderate 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified Leaend: data extracted from RTECS - Register of Toxic Effect of chemical Substances For N,N-diethyl-m-toluamide (Deet) Acute toxicity: Different preparations of Deet with different proportions of the m-isomer produced different oral LD50s. Rats killed by dosages in the LD50 range showed lacrimation, chromodacryorrhea, depression, prostration, tremors, and asphyxial convulsions. Respiratory failure usually preceded cardiac N,N-DIETHYL-M-TOLUAMIDE failure. In rabbits, an intravenous dosage of 75 mg/kg was rapidly fatal, but 50 mg/kg was not. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Reproductive effector in rats

ETHANOL & N.N-DIETHYL-M-TOLUAMIDE

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

| Acute Toxicity | 0 | Carcinogenicity | 0 |
|-----------------------------------|---|--------------------------|---|
| Skin Irritation/Corrosion | ✓ | Reproductivity | 0 |
| Serious Eye Damage/Irritation | ✓ | STOT - Single Exposure | 0 |
| Respiratory or Skin sensitisation | 0 | STOT - Repeated Exposure | 0 |
| Mutagenicity | 0 | Aspiration Hazard | 0 |

Legend:

★ – Data available but does not fill the criteria for classification

🌶 – Data available to make classification

O - Data Not Available to make classification

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SECTION 12 ECOLOGICAL INFORMATION

Toxicity

| Outdoors Insect Repellent Pump Spray 100ml | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|------------------|--------------------|-------------------------------|------------------|------------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| ethanol | LC50 | 96 | Fish | 42mg/L | 4 |
| | EC50 | 48 | Crustacea | 2mg/L | 4 |
| | EC50 | 96 | Algae or other aquatic plants | 17.921mg/L | 4 |
| | NOEC | 2016 | Fish | 0.000375mg/L | 4 |
| | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| N,N-diethyl-m-toluamide | LC50 | 96 | Fish | 71.25mg/L | 4 |
| | EC50 | 48 | Crustacea | 75mg/L | 4 |

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-------------------------|-----------------------------|-----------------------------|
| ethanol | LOW (Half-life = 2.17 days) | LOW (Half-life = 5.08 days) |
| N,N-diethyl-m-toluamide | HIGH | HIGH |

Bioaccumulative potential

| Ingredient | Bioaccumulation | |
|-------------------------|----------------------|--|
| ethanol | LOW (LogKOW = -0.31) | |
| N,N-diethyl-m-toluamide | LOW (BCF = 2.4) | |

Mobility in soil

| Ingredient | Mobility |
|-------------------------|-------------------|
| ethanol | HIGH (KOC = 1) |
| N,N-diethyl-m-toluamide | LOW (KOC = 536.6) |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

- ▶ 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. Product / Packaging disposal
 - ► 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 licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).
 - Decontaminate empty containers.

SECTION 14 TRANSPORT INFORMATION

Labels Required



Marine Pollutant HAZCHEM

•2Y

Land transport (ADG)

UN number

1170

NO

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| UN proper shipping name | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) | | |
|------------------------------|--|--|--|
| Transport hazard class(es) | Class 3 Subrisk Not Applicable | | |
| Packing group | III | | |
| Environmental hazard | Not Applicable | | |
| Special precautions for user | Special provisions 144 223 Limited quantity 5 L | | |

Air transport (ICAO-IATA / DGR)

| UN number | 1170 | | | |
|------------------------------|---|---|-------------|--|
| UN proper shipping name | Ethanol or Ethanol. Solution | | | |
| Transport hazard class(es) | ICAO/IATA Class | 3 | | |
| | ICAO / IATA Subrisk | | | |
| | ERG Code 3L | | | |
| Packing group | | | | |
| Environmental hazard | Not Applicable | | | |
| | Special provisions | | A3 A58 A180 | |
| | Cargo Only Packing Instructions | | 366 | |
| | Cargo Only Maximum Qty / Pack | | 220 L | |
| Special precautions for user | Passenger and Cargo Packing Instructions | | 355 | |
| | Passenger and Cargo Maximum Qty / Pack | | 60 L | |
| | Passenger and Cargo Limited Quantity Packing Instructions | | Y344 | |
| | Passenger and Cargo Limited Maximum Qty / Pack | | 10 L | |

Sea transport (IMDG-Code / GGVSee)

| UN number | 1170 | | |
|------------------------------|--|--|--|
| UN proper shipping name | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) | | |
| Transport hazard class(es) | IMDG Class 3 IMDG Subrisk Not Applicable | | |
| Packing group | | | |
| Environmental hazard | Not Applicable | | |
| Special precautions for user | EMS Number F-E , S-D Special provisions 144 223 Limited Quantities 5 L | | |

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

ETHANOL(64-17-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

| Australia Exposure Standards |
|--|
| Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals |
| Australia Inventory of Chemical Substances (AICS) |
| |

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix B (Part 3)

 $\label{eq:australia} \textbf{Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix}$ F (Part 3)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule

\parallel N,N-DIETHYL-M-TOLUAMIDE(134-62-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Inventory of Chemical Substances (AICS)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule

National Inventory Status

| National Inventory | Status |
|--------------------|--------|
| Australia - AICS | Y |
| Canada - DSL | Υ |

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| Canada - NDSL | N (N,N-diethyl-m-toluamide; ethanol) |
|-------------------------------|--|
| China - IECSC | Υ |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | Υ |
| Korea - KECI | Υ |
| New Zealand - NZIoC | Υ |
| Philippines - PICCS | Υ |
| USA - TSCA | Y |
| Legend: | Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

SECTION 16 OTHER INFORMATION

| Revision Date | 11/09/2018 |
|---------------|------------|
| Initial Date | 11/09/2018 |

Other information

Ingredients with multiple cas numbers

| Name | CAS No |
|---------|--------------------|
| ethanol | 64-17-5, 2348-46-1 |

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chernwatch Classification committee using available literature references.

The 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. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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