

# Material Safety Data Sheet

**Product:** Bushman Ultra – Water Resistant Insect Repellent      **Date Prepared:** 18 January 2010

**Company:** North Queensland Laboratories Pty Ltd      **Replaces:** 22 September 2008

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## 1 Identification

**Product Name:** Bushman Ultra – Water Resistant Insect Repellent  
**Other Names:** 75g Ultra Gel Repellent; 1kg Ultra Gel Repellent

**Manufacturer's Product Code:** BU75G, BU1000G  
**Uses:** Personal Insect Repellent

**Supplier Name:** North Queensland Laboratories Pty Ltd  
**Address:** 63 Koppen Tce, Cairns, Qld 4870 Australia  
**Telephone:** (07) 4054 6020 (24 hours)

## 2 Hazards Identification

Classified as hazardous according to the criteria of NOHSC

Not classified as dangerous good as classified by the criteria published in the Australian Dangerous Goods Code.

Harmful (Xi): May cause irritation to skin in rare cases. May cause mild irritation to the eyes.

### Risk Phrases:

R22: Harmful if swallowed.  
R36/38: Irritating to eyes and skin.

### Safety Phrases:

S(2): Keep out of reach of children.

## 3 Composition / Ingredients

<b><u>Identity (Other Names)</u></b>	<b><u>CAS Number</u></b>	<b><u>Proportion</u></b>
DEET (Diethyltoluamide)	134-62-3	80%
Other non-hazardous ingredients	-	20%

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## 4 First Aid Measures

- Swallowed:** Give water to drink. Contact a doctor or Poisons Information Centre. Phone 13 11 26.
- In Eye:** Wash continuously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek prompt medical attention.
- On Skin:** Intended for application to skin. Remove with soap and water if irritation occurs. Seek medical advice if irritation persists.
- Inhaled:** Remove to fresh air. If breathing difficulties are experienced, seek medical attention.
- Advice to Doctor:** Treat symptomatically

## 5 Fire Fighting Measures

- Extinguishing Media:** Foam, dry chemical, CO<sub>2</sub> or water spray
- Hazardous Combustion Products:** Gases evolved in fire could include carbon monoxide, carbon dioxide and nitrous oxides.
- Precautions for Fire Fighters:** Normal fire-fighting procedures can be used. Avoid contamination with oxidising materials (e.g. pool chlorine) as ignition may occur.
- Hazchem Code:** None allocated

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## 6 Accidental Release Measures

**Emergency Procedures:** Product is packaged in small containers. Large spills are unlikely.

**Containment of Spill:** In case of **small spill**, collect packaging, mop or wipe up, wrap packaging and material in paper and dispose of in garbage. Wash area with water and detergent.

In case of **large spill**, cover with absorbent material. Shovel material into clean, dry, labelled containers and close lid. Do not allow material to enter waterways.

## 7 Handling and Storage

**Precautions for Safe Handling:** Product is designed for application to the skin. Avoid contact with eyes and plastic.

**Conditions for Safe Storage:** Store in original container and out of reach of children.

## 8 Exposure Controls / Personal Protection

**Engineering Controls:** None applicable. Normal ventilation is usually adequate.

**Personal Protective Equipment:** Not normally required. Product is intended for application to skin.

## 9 Physical and Chemical Properties

**Appearance:** Clear viscous liquid

**Solubility in water:** Insoluble

**pH:** 5.5 – 6.5

**Specific Gravity / Density:** 0.99 – 1.10

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## 10 Stability and Reactivity

**Chemical Stability:** Stable under normal conditions.  
**Incompatible Materials:** Oxidising or reducing agents, strong acids and strong alkalis.  
**Hazardous Decomposition Products:** In fire, carbon monoxide, carbon dioxide and nitrogen oxides may be produced.

## 11 Toxicological Information

### Acute

**Swallowed:** Estimated LD<sub>50</sub> > 2,000 mg/kg.  
**In Eyes:** Irritant.  
**On Skin:** No effects likely – in rare cases, may cause irritation.  
**Inhaled:** None

**Chronic** None known.

## 12 Ecological Information

**Environmental Data:** Not available.

## 13 Disposal Considerations

**Disposal Methods:** **Small quantities** can be disposed of in household garbage.  
**Large quantities** should be disposed of in accordance with local regulations.

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## 14 Transport Information

Not a dangerous good for transport purposes.

**UN Number:** None allocated.

**Proper Shipping Name:** None allocated.

**Class (Subsidiary Risk):** Not a dangerous good.

## 15 Regulatory Information

**Poison Scheduling:** S5

**Registration/Notification:** Registered by the Australian Pesticides and Veterinary Medicines Authority (**APVMA No. 46036**).

## 16 Other Information

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### Glossary

**ACGIH** - American Conference of Governmental and Industrial Hygienists.

**ASCC** - Australian Safety and Compensation Commission.

**BCF - Bioconcentration Factor** - ability to accumulate a chemical in an organism to levels greater than in the surrounding medium. Calculated by dividing the concentration of a chemical in an organism by the concentration in the surrounding medium.

**EC<sub>50</sub>** - median effective concentration. The concentration of a substance that courses a specified response/effect in an organism or population.

**Explosive Limits** - The range of concentrations (% by volume in air) of a flammable gas or vapour that can result in an explosion in a confined space.

**K<sub>oc</sub>** - the organic carbon partition coefficient (mL soil water /g organic carbon).

**LC<sub>50</sub>** - Lethal Concentration 50%. The concentration of a substance that kills 50% of a target population.

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**LD<sub>50</sub>** - Lethal Dose-50%. The dose of a substance that kills 50% of a target population.

**NOAEL** – The highest dose or concentration of a substance used in a test/study that does not produce any observable adverse effects in the target organism.

**NOEL** – The highest dose call concentration of a substance used in a test/study that does not produce any observable effects in the target organism.

**pH** - Measure of how acidic or alkaline a material is using a 1 - 14 scale. pH 1 is strongly acidic and pH 14 strongly alkaline.

**Polymerisation** - a chemical reaction in which molecules (monomers) combine to form larger molecules (polymers). A hazardous polymerisation reaction is one that occurs at a fast rate and releases large amounts of energy.

**P<sub>ow</sub>** - The octanol-water partition coefficient. The ratio of the concentration of octanol and in water at equilibrium and at a specified temperature used in environmental studies to indicate fate of chemicals and the environment.

**STEL** - Short-Term Exposure Limit. The maximum concentration of a substance that workers can be exposed to for periods up to 15 minutes without adverse effects e.g. irritation, tissue damage, narcosis (drowsiness or unconsciousness).

**TWA** - Time Weighted Average. The time weighted average concentration of a substance that most workers may be repeatedly exposed to over a 8-hour or 40-hour week without adverse effect.

## References

Prepared using data supplied by manufacturer and public databases.