

SAFETY DATA SHEET

Product:	Bushman Plus Water Resistant Insect Repellent	Date Prepared: 15 Dec 2016
Company:	Juno Ltd	Replaces: 18 Jan 2010

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1 Identification

Product Name: Bushman Plus Water Resistant Insect Repellent
Other Names: Plus DryGel
Manufacturer's Product Code: BP75G
Uses: Personal Insect Repellent
Supplier Name: Juno Ltd
Address: 68 Bond St West,
Modialloc, Vic. 3195
Australia
Telephone: +61 (0)3 9587 8514

2 Hazards Identification

Users of the product should refer to the APVMA approved label on the container for advice in relation to use and handling of the product.

The hazard information contained in this SDS is for people handling the product and its ingredients in the manufacturing environment.

Hazard Class and Category:

Acute Toxicity (Category 4)
Eye Irritation (Category 2)
Skin Irritation (Category 2)
Aquatic Chronic (Category 3)



Signal Word:

Warning

Hazard Statements:

Harmful if swallowed
Causes serious eye irritation.
Causes skin irritation.
Harmful to aquatic life with long lasting effects

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Precautionary Statements:

Prevention

Wash exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves and eye protection/face protection.
Avoid release to the environment.

Response

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
IF ON SKIN: Wash with plenty of soap and water. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

3 Composition / Ingredients

<u>Identity (Other Names)</u>	<u>CAS Number</u>	<u>Proportion</u>
DEET (Diethyltoluamide)	134-62-3	80%
Other ingredients not individually contributing to the hazard classification		20%

4 First Aid Measures

<u>First Aid</u>		
-	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

**If poisoning occurs, contact a doctor or Poisons Information Centre.
Phone 13 11 26.**

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5 Fire Fighting Measures

Extinguishing Media:	Foam, dry chemical, CO ₂ or water spray
Hazards from 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

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. If ventilation inadequate use forced air ventilation.

Personal Protective Equipment:

Respiratory Protection:

Not normally required. If required use a respirator fitted a cartridge suitable for organic vapours/mists. Product is intended for application to skin.

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Eye and Face Protection:

In the manufacturing environment wear chemical resistant goggles or face shield.

Skin and Body Protection:

In the manufacturing environment wear chemical resistant gloves and coveralls covering arms and legs. Chemical resistant footwear is recommended.

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

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 Toxicity**Swallowed:**

Estimated LD₅₀ 3975 mg/kg.

In Eyes:

Irritant.

On Skin:

In rare instances may cause skin irritation and/or sensitisation.

Inhaled:

Not hazardous

Chronic:

Does not contain any component that is classified as a carcinogen.

Mutagenicity:

Does not contain components known to be mutagenic

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Reproduction/Development

Does not contain components known to cause reproductive or developmental effects

Specific Target Organ Toxicity: Specific Target Organ Toxicity (Single Exposure):

No information found

12 Ecological Information

Environmental Data:

DEET: lowest found acute aquatic EC_{50} = 75 mg/L.
DEET: lowest found Chronic NOEL = 0.5 mg/L.

Persistence and Degradability:

The active constituent (DEET) is not expected to bioaccumulate. Modelling suggests rapid to moderate degradation.

Contains materials of mineral origin that are likely to persist in the environment.

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.

14 Transport Information

Not dangerous goods for transport purposes in Australia by road or rail.

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. 47107).

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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.

EC₅₀ - 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_{oc} - the organic carbon partition coefficient (mL soil water /g organic carbon).

LC₅₀ - Lethal Concentration 50%. The concentration of a substance that kills 50% of a target population.

LD₅₀ - 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_{ow} - 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).

SWA - Safe Work Australia.

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 publicly available information sources.

Hazard classification conducted according to the Safe Work Australia Guidance on the Classification of Hazardous Chemicals under the WHS Regulations.