

# SAFETY DATA SHEET

<b>Product:</b>	Bushman Roll-On Personal Insect Repellent	<b>Date Prepared:</b> 15 Dec 2016
<b>Company:</b>	Juno Ltd	<b>Replaces:</b> 01 Nov 2016

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## 1 IDENTIFICATION

**Product Name:** Bushman Roll-On Personal Insect Repellent  
**Other Names:** Bushman 20% Roll-On  
**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:

Eye Irritation (Category 2)  
Skin Irritation (Category 2)



### Signal Word:

Warning

### Hazard Statements:

Causes serious eye irritation.  
Causes skin irritation

### Precautionary Statements:

#### Prevention

Wear protective gloves and eye protection/face protection.  
Avoid release to the environment.  
Wash exposed skin thoroughly after handling.

#### Response

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs:  
Get medical advice/attention. Take off contaminated  
clothing and wash before reuse.

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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 AND INFORMATION ON INGREDIENTS

Substance Name	CAS Number	Concentration
Diethyltoluamide (DEET)	134-62-3	20% w/v
Other proprietary ingredients not individually contributing to hazards		80%

## 4 FIRST-AID MEASURES

First-Aid		
-	<b>Inhalation</b>	Remove to fresh air. If breathing difficulties are experienced, seek medical attention.
-	<b>Skin Contact</b>	Product is designed for application onto skin. If irritation develops stop using product. <b>In manufacturing environment or handling bulk material:</b> If large amounts on skin wash off with plenty of soap and water. If irritation develops and persists get medical advice/attention.
-	<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
-	<b>Ingestion</b>	Give water to drink. Do NOT induce vomiting. Contact a doctor or Poisons Information Centre. Phone 13 11 26.
<b>Special Advice/Treatment:</b>		Treat symptomatically

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

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## 5 FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Equipment:</b>	Foam, dry chemical, CO <sub>2</sub> or water spray
<b>Flash Point:</b>	>100°C
<b>Hazards from Combustion Products:</b>	Gases evolved in fire could include carbon monoxide, carbon dioxide and nitrous oxides.
<b>Precautions for Fire-Fighters</b>	Normal fire-fighting procedures can be used.
<b>HAZCHEM CODE</b>	None assigned

## 6 ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures:

Product is packaged in small containers and intended for application onto skin. Small spills are unlikely to pose significant risk.

**In manufacturing environment or handling bulk material:** Wear chemical resistant footwear, gloves and coveralls when handling large spills. Ensure adequate ventilation. If ventilation inadequate wear respirator fitted with organic vapour filter.

### Containment:

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 **larger 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

### Requirements for Storage Areas and Containers:

Store in original container and out of reach of children.

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## 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Engineering Controls:

None applicable. Normal ventilation is usually adequate. If ventilation inadequate use forced air ventilation.

### Personal Protective Equipment (Manufacturing environment):

#### Respiratory Protection:

Not normally required. If required use a respirator fitted a cartridge suitable for organic vapours/mists.

#### 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

<b>Appearance:</b>	Hazy thixotropic gel with slight bluish tinge
<b>Odour:</b>	Powdery/floral odour when applied to skin.
<b>Relative Density:</b>	1.0 at 22°C

## 10 STABILITY AND REACTIVITY

### Reactivity:

Hazardous polymerisation not known to occur.

### 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.

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## 11 TOXICOLOGICAL INFORMATION

### Acute Toxicity:

#### Oral:

Low toxicity. Estimated LD<sub>50</sub> > 5,000 mg/kg. GHS Category 5.

#### Inhalation:

Not an expected route of exposure due to gel consistency and presentation of product in a roll-on applicator.  
Low toxicity: Estimated LC<sub>50</sub> >5 mg/L. GHS Category 5.

#### Dermal:

Low toxicity: Estimated LD<sub>50</sub> > 2,000 mg/kg. GHS Category 5.

#### Skin Corrosion/Irritation:

The product is intended for application onto skin. Irritating to mucous membranes. Under normal conditions irritation is not expected. Based on information for active constituent (classified as potentially being a skin irritant Category 2) the product is considered to potentially irritate to skin.

#### Eye Damage/Irritation:

Based on the components the product is classified as irritating to eyes and mucous membranes (GHS Category 2).

#### Sensitisation:

Based on the components the product is not classified as a sensitiser.

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

No information found

### Mutagenicity:

Does not contain components known to be mutagenic

### Reproduction/Development

Does not contain components known to cause reproductive or developmental effects

### Chronic:

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

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## 12 ECOLOGICAL INFORMATION

### Ecotoxicity:

Based on information for the active constituent (DEET). The calculated values for the product:

EC<sub>50</sub> *Daphnia magna*: > 100 mg/L.

LC<sub>50</sub> (96h) Rainbow trout: > 100 mg/L

LC<sub>50</sub> (96h) Fathead minnow: >100 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 of Containers:

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

## 14 TRANSPORT INFORMATION

Not classified as Dangerous Goods for Transport by Road and Rail within Australia according to the criteria of ADG 7.

<b>UN Number:</b>	None assigned
<b>Proper Shipping Name:</b>	None assigned
<b>Class:</b>	None assigned

## 15 REGULATORY INFORMATION

<b>Poison Scheduling:</b>	Not Scheduled
<b>APVMA Registration No:</b>	69554

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## 16 OTHER RELEVANT INFORMATION

Glossary:

**BCF: Bioconcentration Factor** - a measure for the characterization of the accumulation of a chemical in an organism. It is defined as the concentration of a chemical in an organism (plants, microorganisms, animals) divided by the concentration in a reference compartment (e.g. food, surrounding water).

**EC<sub>50</sub>:** Concentration of a substance in an environmental medium expected to produce a certain effect in 50% of test organisms in a given population under a defined set of conditions.

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

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

**LC<sub>50</sub>** - The concentration of chemical in air or water that will kill 50% of the test organisms.

**LD<sub>50</sub>** - The dose of a chemical that will kill 50% of the test animals receiving it.

**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.

**P<sub>ow</sub>** - The octanol-water partition coefficient. Commonly used to indicate potential the fate of chemicals in the environment.

**STEL** – Short Term Exposure Limit, The maximum concentration workers can be exposed to a contaminant in air for up to 15 minutes without suffering adverse effects.

**SWA:** Safe Work Australia.

**TWA** - Time Weighted Average. The average concentration of a chemical in air over the total exposure time - usually an 8 hour work day.

### 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.

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