

# SAFETY DATA SHEET

<b>Product:</b>	Bushman Personal Insect Repellent	<b>Date Prepared:</b>	8 December 2016
<b>Company:</b>	Juno Ltd	<b>Replaces:</b>	26 September 2014

Page 1 of 6

## 1 Identification

**Product Name:** Bushman Personal Insect Repellent  
**Other Names:** Ultra Aerosol 60 g Aerosol; 130 g Aerosol; 225 g Aerosol  
**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:

Extremely flammable Gas (Category 1)  
Eye Irritation (Category 2)  
Skin Irritation (Category 2)  
Skin Sensitisation (Category 1)



### Signal Word:

Danger

### Hazard Statements:

Extremely flammable  
Causes serious eye irritation.  
Causes skin irritation.  
May cause an allergic skin reaction

### Precautionary Statements:

#### **Prevention**

Keep away from heat/sparks/open flames/hot surfaces.— No smoking.  
Do not spray on an open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use.  
Wash exposed skin thoroughly after handling.  
Wear protective gloves and eye protection/face protection.

#### **Response**

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.

# SAFETY DATA SHEET

<b>Product:</b>	Bushman Personal Insect Repellent	<b>Date Prepared:</b>	8 December 2016
<b>Company:</b>	Juno Ltd	<b>Replaces:</b>	26 September 2014

Page 2 of 6

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.

## **Storage**

Protect from sunlight. Do not expose to temperatures exceeding 50°C

## **3 Composition / Ingredients**

<b><u>Identity (Other Names)</u></b>	<b><u>CAS Number</u></b>	<b><u>Proportion (w/w)</u></b>
DEET (Diethyltoluamide)	134-62-3	40%
Ethanol	64-17-5	10 - 30%
Butane	106-97-8	10 - 30%
Other proprietary ingredients not individually contributing to the hazard classification		<10%

## **4 First Aid Measures**

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

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

## **5 Fire Fighting Measures**

<b>Flammability</b>	Highly Flammable
<b>Extinguishing Media:</b>	Foam, dry chemical, CO <sub>2</sub> or water fog
<b>Hazardous Combustion Products:</b>	Aerosol containers can explode when heated.
<b>Precautions for Fire Fighters:</b>	Fight fire from maximum distance possible or from protected area. Wear self-contained

# SAFETY DATA SHEET

<b>Product:</b>	Bushman Personal Insect Repellent	<b>Date Prepared:</b>	8 December 2016
<b>Company:</b>	Juno Ltd	<b>Replaces:</b>	26 September 2014

Page 3 of 6

	breathing apparatus and protective clothing.
<b>Hazchem Code:</b>	2Y

## 6 Accidental Release Measures

### Emergency Procedures:

Extinguish any sources of ignition. Do not puncture cans.

### 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 **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

### Precautions for Safe Handling:

Product is designed for application to the skin. Avoid contact with eyes and plastics. Do not intentionally concentrate and inhale.

### Conditions for Safe Storage:

Store out of reach of children.

## 8 Exposure Controls / Personal Protection

### Exposure Guidelines:

Ethanol:

SWA: TWA 1000 ppm (1880 mg/rn<sup>3</sup>)

Butane:

SWA: TWA 800 ppm (1900 mg/rn<sup>3</sup>)

### Engineering Controls:

Local exhaust and/or mechanical exhaust, fitted with flame and explosion proof electrical fittings recommended

### Personal Protective Equipment (Manufacturing environment):

#### Respiratory Protection:

Not normally required. Respiratory protection (organic vapour) should

# SAFETY DATA SHEET

<b>Product:</b>	Bushman Personal Insect Repellent	<b>Date Prepared:</b>	8 December 2016
<b>Company:</b>	Juno Ltd	<b>Replaces:</b>	26 September 2014

Page 4 of 6

be used where vapours may accumulate. Air-purifying respirators should be used in oxygen deficient atmospheres.

## Eye and Face Protection:

Eye protection (face shield or chemical resistant goggles) should be worn where there is potential for product to be splashed onto face or into eyes.

Note that DEET softens many plastics and face shields/goggles may be damaged if they come into contact with DEET.

## Skin and Body Protection:

Chemical resistant gloves (butyl rubber) and footwear should be used when handling large quantities of the product.

## 9 Physical and Chemical Properties

<b>Appearance:</b>	Clear Liquid
<b>pH:</b>	5.5 - 6.5

## 10 Stability and Reactivity

<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Excessive heat

## 11 Toxicological Information

### Acute Toxicity:

#### Swallowed:

Slightly hazardous. Estimated LD<sub>50</sub> >2,000 mg/kg

#### In Eyes:

Irritant

#### On Skin:

No effects likely - in rare cases, may cause irritation and/or sensitisation

#### Inhaled:

Product has relatively low toxicity but can irritate eyes and mucous membranes. Inhalation of high concentrations can result in dizziness, disorientation, nausea and, in extreme cases, asphyxiation.

### Carcinogenicity:

Not classified as a carcinogen although IARC has classified ethanol as a

# SAFETY DATA SHEET

<b>Product:</b>	Bushman Personal Insect Repellent	<b>Date Prepared:</b>	8 December 2016
<b>Company:</b>	Juno Ltd	<b>Replaces:</b>	26 September 2014

Page 5 of 6

carcinogen based on the effects caused by drinking alcoholic beverages. Occupational exposure is not known to result in carcinogenic effects.

## Target Organ Toxicity:

No data are available for the product. Long term ingestion of ethanol may cause changes in liver, kidneys, gastrointestinal tract and heart muscle.

## 12 Ecological Information

### Ecotoxicity:

Based on DEET: Lowest acute aquatic LC<sub>50</sub> = 75 mg/L. Chronic NOEC = 0.5 mg/L

### Persistence and Degradability:

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

## 13 Disposal Considerations

### Disposal Methods:

**Small quantities:** Small quantities may be disposed of in household garbage. Do not puncture cans. Do not incinerate.

**Large quantities:** Do not puncture cans. Dispose of according to relevant regulations. Do not incinerate.

## 14 Transport Information

<b>UN Number:</b>	1950
<b>Proper Shipping Name:</b>	Aerosol
<b>Class (Subsidiary Risk):</b>	2
<b>Packing Group:</b>	Not Applicable
<b>Special Precautions for User:</b>	Do not puncture cans. Keep away from sources of heat.
<b>Hazchem Code:</b>	2Y

## 15 Regulatory Information

<b>Poison Scheduling:</b>	Not Scheduled
<b>APVMA Registration No</b>	60969

# SAFETY DATA SHEET

<b>Product:</b>	Bushman Personal Insect Repellent	<b>Date Prepared:</b>	8 December 2016
<b>Company:</b>	Juno Ltd	<b>Replaces:</b>	26 September 2014

Page 6 of 6

## 16 Other Information

<b>Date Prepared:</b>	15 December 2016
<b>Replaces:</b>	New

### 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.

**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).

**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 public databases.

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