



Bushman® Naturals Personal Insect Repellent

Safety Data Sheet

Issue Date: 30 July 2020

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MUCH OF THE ADVICE IN THIS SDS ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. PRODUCT USERS SHOULD SEE THE PRODUCT LABEL FOR SAFE USE.

Juno Limited encourages and expects you to read and understand the entire SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this SDS

1. Identification

Product name: Bushman Naturals Personal Insect Repellent

Company Product Number:

Recommended use of the chemical and restriction on use: Ready to use personal Insect Repellent

Company Details: Juno Limited
68 Bond Street West
Mordialloc
VIC 3195

Tel: +61 (0)3 9587 8514
Email: info@junolabs.com.au

Emergency Telephone Number: +61 (0)3 9587 8514
(9 AM to 5 PM, Monday to Friday, Eastern Australia time)

Transport Emergency Only: Dial 000

2. Hazards Identification

GHS Classification

Flammable Liquid	Category 2	H225	Highly flammable liquid and vapor
Serious eye damage/Irritation	Category 2A	H319	Causes serious eye irritation

GHS label elements



Signal word Danger

Precautionary statements

Prevention:
 P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233: Keep container tightly closed.
 P240: Ground/ Bond container and receiving equipment.
 P241: Use explosion-proof electrical ventilating lighting/equipment.
 P242: Use only non-sparking tools.
 P243: Take precautionary measures against static discharge.
 P264: Wash hands thoroughly after handling.
 P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
 P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 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 + P317: If eye irritation persists: Get medical help.
 P370 + P378: In case of fire: Use water spray to extinguish.

Storage:
 P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:
 P501: Dispose of contents/container in accordance with local regulation.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Oil of Lemon Eucalyptus (Hydrated, cyclized)	1245629-80-4	21.4%
Ethanol	64-17-5	53%
Non-Hazardous Ingredients	Various	< 5%
Water	7732-18-5	Balance

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid Measures

General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment. If poisoning occurs contact a doctor or Poisons Information Centre (Phone Australia 131126). Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Swallowed	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT INDUCE vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Eye contact	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhaled	IF INHALED: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Call a poison control center or doctor if effects persist.
Notes to Physician	Treat symptomatically
PPE for First Aiders	Wear overalls, safety glasses and impervious gloves. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

5. Firefighting Measures

Suitable extinguishing equipment:	If material is involved in a fire use alcohol resistant foam, water fog (or if unavailable fine water spray), foam or dry agent (carbon dioxide, dry chemical powder).
Specific hazards arising from the chemical:	Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc.) must be eliminated both in and near the work area. Do NOT smoke.
Special protective equipment and precautions for firefighters:	Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.
Hazchem code:	●2YE

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Shut off all possible sources of ignition. In the event of a major spillage alert the fire brigade to location and give brief description of hazard. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Work up wind or increase ventilation. Containment Procedure: If safe to do so, isolate the leak. Small spills can be allowed to evaporate provided there is adequate ventilation.
Methods and material for containment and cleaning up	Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up. Collect and seal in properly labelled containers or drums for disposal. Use a spark-free shovel.
Environmental Precautions	Contain - prevent run off into drains and waterways. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture. If contamination of sewers or waterways has occurred advise local emergency services.

7. Handling and Storage

Handling	Avoid eye contact and repeated or prolonged skin contact.
Storage	<p>Keep product tightly sealed in original containers. Store product in a cool, dry, well-ventilated area. Do not store in low temperatures (below 5 °C). Store away from combustible or flammable products. Keep product packaging clean and free of all contamination.</p> <p>This material is classified as a Dangerous Good Class 3 Flammable Liquid as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations.</p>

8. Exposure Controls / Personal Protection

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. PRODUCT USERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Workplace Exposure Standards

An exposure standard has not been established for this product. The following limits have been established for the ingredients:

Work Place Australia Exposure Standards for Airborne Contaminants

Ingredient	CAS No.	TWA ppm	TWA (mg/m ³)	STEL ppm	STEL (mg/m ³)
Ethyl Alcohol (Ethanol)	64-17-5	1000	1,880		

Engineering Controls

In industrial situations, concentration values below the TWA value must be maintained. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes	Use chemical goggles. Emergency eyewash should be provided in the immediate work area.
Skin	Wear overalls, and impervious gloves. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. A safety shower should be provided in the immediate work area.
Respiratory	If risk of inhalation of vapour/mist exists, wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. Physical and Chemical Properties

Appearance	Clear Liquid
Odour	Lemon scent
pH	3.5 - 5
Solubility (water)	Not determined for product. For Oil of Lemon Eucalyptus (Hydrated, cyclized): 670.7 mg/L at 25 °C
Specific gravity / density	0.85 – 0.95 g/mL
Flash point	13 °C (ethanol)
Oxidising	Not an oxidiser
Volatiles	Volatile based on ethanol content
Corrosiveness	Not corrosive

10. Stability & Reactivity

Stability and Reactivity Summary	This material is thermally stable when stored and used as directed. No reactivity hazards are known for the material.
Conditions to Avoid	Elevated temperatures and sources of ignition.
Chemical Incompatibility	Oxidising agents.
Hazardous Reactions and Decomposition Products	No known hazardous reactions. Oxides of carbon and nitrogen, smoke and other toxic fumes. Carbon dioxide (CO ₂), Carbon monoxide

11. Toxicological Information

No specific data is available for this product. Where available, toxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following toxicity:

Supporting Data

Acute Oral	Acute toxicity estimate (based on ingredients): >2,000 mg/kg
Acute Dermal	Acute toxicity estimate (based on ingredients): >2,000 mg/kg
Inhalation	Acute toxicity estimate (based on ingredients): >20 mg/L
Eye irritation/corrosivity	An eye irritant.
Respiratory irritation/corrosivity	Material may be an irritant to mucous membranes and respiratory tract.
Skin irritation	This material has been classified as not corrosive or irritating to skin.
Sensitisation	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a sensitizer.
Mutagenicity	No data for mixture is available. No ingredient is considered to be a mutagen.
Carcinogenicity	No data for mixture is available. The components in this product are not known or reported to be carcinogenic by any reference source including IARC.
Reproductive / Developmental	No data for mixture is available. No ingredient is considered to be a reproductive or developmental toxicant or have any effects on or via lactation.
Systemic	No data for mixture is available. No ingredient is considered to be a target organ toxicant.
Aggravation of existing conditions	None known.

12. Ecological Information

Summary

No specific data is available for this product. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity.

Supporting Data

Aquatic	<p>No data for mixture is available. Data for components includes: Ethanol: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L Oil of Lemon Eucalyptus (Hydrated, cyclized):</p> <table border="1"> <thead> <tr> <th>Species</th> <th>Endpoint</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Fish: <i>Danio rerio</i></td> <td>96 hour EC₅₀</td> <td>>35mg/L</td> </tr> <tr> <td>Invertebrates: <i>Daphnia Magna</i></td> <td>48 hour EC₅₀</td> <td>>26mg/L</td> </tr> <tr> <td>Algae: <i>Pseudokirchneriella</i></td> <td>72 hour EC₅₀</td> <td>>37mg/L</td> </tr> </tbody> </table>	Species	Endpoint	Value	Fish: <i>Danio rerio</i>	96 hour EC ₅₀	>35mg/L	Invertebrates: <i>Daphnia Magna</i>	48 hour EC ₅₀	>26mg/L	Algae: <i>Pseudokirchneriella</i>	72 hour EC ₅₀	>37mg/L
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Bioaccumulation	No data for mixture is available. No evidence of bioaccumulation.												
Soil Degradability	No data for mixture is available. No evidence of persistence in the environment.												
Soil mobility	No information available.												

13. Disposal Considerations

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES

For the safety of persons conducting disposal, recycling or reclamation activities, refer to the information in Section 8 – Exposure Controls and Personal Protection of this SDS.

Disposal method	<p>Disposal of this product must comply with the requirements of state and local disposal regulations. The substance must be handled as hazardous waste and disposed of in an approved facility.</p> <p>Dispose of consumer packaging by wrapping in paper, placing in plastic bag and putting in garbage.</p>
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14. Transport Information

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG 7)

UN number:	1170	Proper shipping name:	ETHANOL
Class(es):	3	Packing group:	II
Precautions:	Corrosive	Limited Quantity Packaging	1 kg (PG II)
Marine Pollutant:	Yes	Hazchem code:	•2YE
Other. Emergency Response Guide No.: 14 Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply.			

IATA

UN number:	1170	Proper shipping name:	ETHANOL
Class(es):	3	Packing group:	II

IMDG

UN number:	1170	Proper shipping name:	ETHANOL
Class(es):	3	Packing group:	II
Marine Pollutant:	No		

15. Regulatory Information

Poisons Standard (Scheduling):	Not scheduled
APVMA Product Number:	88889

16. Other Information

ADG 7	Australian Dangerous Goods Code Version 7
CAS Number	Unique Chemical Abstracts Service Registry Number
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species).
GHS	Globally Harmonized System of classification and labelling of chemicals (GHS)
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HCIS	Hazardous Chemical Information System (http://hcis.safeworkaustralia.gov.au/HazardousChemical)
IARC	International Agency for Research on Cancer
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
IDLH	Immediately dangerous to life or health (IDLH) is defined by the US National Institute for Occupational Safety and Health (NIOSH)
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population.
NICNAS	Australian National Industrial Chemicals Notification and Assessment Scheme.
NTP	National Toxicology Program (USA)
SDS	Safety Data Sheet
STEL	Short term exposure limit (STEL) means the time-weighted average maximum airborne concentration of a substance calculated over a 15 minute period.
TWA	8-hour Time-weighted average (TWA) means the maximum average airborne concentration of a substance when calculated over an eight-hour working day, for a five-day working week.
WES	Workplace exposure standard
UN Number	United Nations Number

References

Data: Comes from the manufacturers SDSs for the product components. The exposure standards comply with Safe Work Australia HCIS.

Sections Revised: New

Disclaimer

This Safety Data Sheet (SDS) has been prepared in compliance with the Work Safe Australia Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (February 2016). The information in this SDS should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. Additionally, if this SDS is more than five years old, you should contact Juno Ltd at the phone number in Section 1 to make certain that this document is current. The information contained in this document is based on data which, to the best of our knowledge, was accurate and reliable at the time of preparation, no responsibility can be accepted by us for errors and omissions. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of this information.

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