



## MATERIAL SAFETY DATA SHEET

### Bush Flower Combination Essences and Stock Essences

Not subject to the Dangerous Goods ADG Code, IMDG Code and IATA Regulations .  
Not a Hazardous Substance according to the Criteria of the Australian NOHSC.

#### Section 1. IDENTIFICATION

##### COMPANY DETAILS

Company	Bush Biotherapies Pty Ltd ABN: 18 098 133 361
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Contact Details	Technical Enquiries: Greg Long <a href="mailto:purchasing@ausflowers.com.au">mailto:purchasing@ausflowers.com.au</a> Administrative Enquiries: Email: "Karen Sherman" : <a href="mailto:purchasing@ausflowers.com.au">purchasing@ausflowers.com.au</a>

##### IDENTIFICATION

Product Names	<b>Bush Flower Combination Essences (11-13% Ethanol Solution)</b> – 30mL Glass Bottle (supplied individually) – 10ml & 20mL Oral Spray  <b>Bush Flower Stock Essences (21-23% Ethanol Solution)</b> – 15mL Glass Bottle (in a box containing up to 69 bottles) – 10mL White Light Essences – 10mL Light Frequency, Isis and Solar Logos Essences – Bulk Stock of Combinations Essences
Other Names	Brandy and water solutions containing a vibrational infusion of Australian Bush Flowers, which are not detectable within the solution.
Chemical Family	Ethanol Solution

##### USE

Bush Flower Essence
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#### Section 2. HAZARDS IDENTIFICATION

<b>Emergency Overview:</b> Clear solution with a Brandy / Ethanol odour in very small 15 mL or 30 mL glass bottles. No significant health or environmental hazards. The Combination Essences containing 11-13% Ethanol have a flashpoint about 50°C. The Stock Essences containing 21-23% Ethanol have a flashpoint about 35°C.  Ethanol Solutions containing not more than 24% alcohol by volume are Not subject to the Dangerous Goods ADG Code, IMDG Code and IATA Regulations (heated flammable vapours can accumulate, but are not generated at a sufficient rate to continue to burn once the accumulated vapour has been burnt).
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<b>Dangerous Goods Information:</b> Not subject to the Australian Dangerous Goods (ADG) Code, the International Maritime Dangerous Goods (IMDG) Code nor the International Air Transport Association (IATA) Dangerous Goods Regulations. See Special Provision 144.
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<b>Hazardous Substances Information:</b> Not a Hazardous Substance according to the Australian Approved Criteria 2003 [NOHSC: 1008]. Not a Dangerous Substance according to the European Union Dangerous Substances Criteria.
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<b>Poison Schedule</b>	Not Applicable	<b>Signal Word</b>	Not Applicable
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<b>Acute Health Effects</b>	
Swallowed	Not likely to be harmful if swallowed as a bottle contains only 15 to 30 mL of solution. May cause narcotic effects due to the alcohol content only in hypersensitive persons.
Eye	May cause eye irritation.
Skin	Unlikely to cause skin irritation.
Inhaled	Not a likely source of exposure. If a vapour or mist is inhaled, it is unlikely to cause irritation.

<b>Chronic Health Effects</b>	
All Routes	Long term health effects are highly unlikely from normal use.

### Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Prop n	Risk Phrases
<b>Combination Essences:</b>			
Ethanol (from Brandy)	-	11-13% v/v	R11 as 95%
Water	7732-18-5	88-89% v/v	None
Bush Flower Combined Components	-	<0.05%	Not known
<b>Stock Essences:</b>			
Ethanol (from Brandy)	-	21-23% v/v	R11 as 95%
Water	7732-18-5	77-79% v/v	None
Bush Flower Combined Components	-	<0.05%	Not known

### Section 4. FIRST AID MEASURES

Swallowed	If swallowed accidentally. Give water to drink to dilute.
Eye	If the solution comes into contact with eyes, hold open and wash with running water. Seek medical advice if effects persist.
Skin	If this product comes into contact with skin, wash skin with water.
Inhaled	Remove to fresh air.
<b>First-Aid Facilities</b>	Have normal washroom facilities nearby.
<b>Advice to Doctor</b>	Treat symptomatically.
<b>Other Sources of Information</b>	Poisons Information Centres in Australia can provide additional assistance for products containing Ethanol. Phone: Australia 13-1126.

### Section 5 - FIRE FIGHTING MEASURES

Fire or Explosion Hazard:	<i>Combination Essences:</i> Contains 11-13% Ethanol & can flash if heated to $\geq 50^{\circ}\text{C}$ <i>Stock Essences:</i> Contains 21-23% Ethanol & can flash if heated to $\geq 35^{\circ}\text{C}$ . Neither will continue to burn as the Ethanol vapours are not released at a sufficient rate to sustain burning. Thus neither solution is a significant fire hazard.
Extinguishing Media:	Carbon Dioxide, dry chemical, foam, water.

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Special Firefighting Procedures:	Move containers from the fire area if it can be done without risk.
Special Issues & Precautions:	No special issues or precautions.

### Section 6 - ACCIDENTAL RELEASE MEASURES

<b>Spillage:</b>	Prevent the undiluted Essences from entering drains or water courses. Stop leak and contain spill. Collect into labelled containers for disposal. After spills, wash area, preventing run off from entering drains.  See Section 13 for Disposal Considerations
<b>Special Issues</b>	Stock Essences have sufficient Ethanol (21-23%) to flash if heated to $\geq 35^{\circ}\text{C}$ but will not continue to burn as the Ethanol vapours are not released at a sufficient rate. The 15 to 30 mL container sizes are so small there is not an increased fire risk.

### Section 7 - HANDLING and STORAGE

Handling	Avoid spillage. Avoid contact with strong oxidising agents and strong acids.
Storage	Store in a well ventilated area. Store away from sources of high heat, strong oxidising agents and strong acids. Keep containers closed at all times.

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Design and Engineering Control Measures	Use good ventilation to maintain the air concentration below the exposure standards. Air concentrations may 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 or vapours are high you are advised to modify the environment to reduce the problem.
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Exposure Standards	Exposure Standards determined by Safe Work Australia (formerly ASCC and NOHSC).  Ethanol                      1000 ppm    1880 mg/m <sup>3</sup> TWA  The other ingredients do not have an exposure standard.
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Personal Protection Equipment	Avoid eye contact. Consider the following personal protective equipment:  (1). Protective gloves to avoid unnecessary repeated skin contact (e.g. rubber or plastic). (2). Safety glasses with side shields where splashes may occur.  Where applicable refer to the following Standards: AS/NZS 1337    Eye protectors for industrial applications. AS 2161            Industrial safety gloves and mittens.  Always wash hands before smoking, eating, drinking or using the toilet.
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### Section 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical Form	Solution
Appearance and Odour	Clear light brown solution with brandy alcohol odour.
Chemical Formula (for the main ingredients)	Ethanol: CH <sub>3</sub> -CH <sub>2</sub> -OH; Water: H <sub>2</sub> O Not provided for the other ingredients.
Melting Point / Boiling Point	MP 0°C approx (water) BP 100°C (water)
Vapour Pressure	As for water.
Specific Gravity	<i>Combination</i> : 0.98 approx. at 20°C; <i>Stock</i> : 0.95 approx at 20°C
Flashpoint	<i>Stock</i> 21-23% Ethanol: 35°C. <i>Combination</i> 11-13% Ethanol: 50°C (Fl. Pts estimated from data in NFPA 325M – Properties of Flammable Liquids, Gases, Volatile Solids)
Flammability Limits (FL) (%)	Lower FL: 3.3% Upper FL: 19% (for 95% Ethanol)
Auto ignition Temp	Not applicable
Relative Vapour Density	Not available (air=1)
Solubility	Completely soluble in water.
Percent volatile by volume	100%
pH	5-9 (of the essence solution)
Odour Threshold	Not available
Saturated Vapour Conc'n	Not available
Evaporation Rate	<1 (Butyl Acetate = 1)
Octanol / Water Partition Co-efficient	log P(Octanol/Water) - Not available
Corrosiveness	Not corrosive.

### Section 10 - STABILITY AND REACTIVITY

Reactivity	Stable.
Conditions to Avoid:	<i>Combination</i> : None at room temperature. If hot keep away from ignition sources. <i>Stock</i> : Ignition sources (flames etc).
Incompatible Materials:	Strong oxidizers, strong acids.
Hazardous Decomposition Products:	If Overheated: Ethanol vapours will be released. If Burnt: Carbon Monoxide and smoke (if combustion is incomplete).
Hazardous Polymerisation:	Will not occur.

### Section 11 - TOXICOLOGICAL INFORMATION

Overall Product Toxicity Data: Acute Oral Toxicity LD50 (rat): >2000 mg/kg
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### Section 12 - ECOLOGICAL INFORMATION

General:	<i>Combination</i> : No environmental issues expected. <i>Stock</i> : Slightly water polluting substance. Avoid contaminating waterways.
Mobility:	Soluble in water.
Ecotoxicological Data:	All ingredients are chemicals able to be readily biodegraded at the concentrations present once diluted in water.

### Section 13 - DISPOSAL CONSIDERATIONS

Material:	Disposal to be in accordance with Local, State & Federal EPA waste regulations. These 15 to 30 mL bottles may normally be diluted and rinsed into the sewer system.
Container Disposal:	Recycle containers wherever possible.

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### Section 14 - TRANSPORT INFORMATION

#### ROAD & RAIL; SEA; AIR:

Not subject to the Australian Dangerous Goods (ADG) Code, nor the International Maritime Dangerous Goods (IMDG) Code, nor the International Air Transport Association (IATA) Dangerous Goods Regulations.

Under UN 1170 ETHANOL SOLUTION see Special Provision 144 in the ADG Code, IMDG Code & IATA Regs. "An aqueous solution containing not more than 24% alcohol by volume is not subject to this" Code or Reg.

### Section 15 - REGULATORY INFORMATION

<b>Labelling:</b>	<b>Not Dangerous Goods, nor Hazardous Substance or nor Scheduled Poison.</b>
<b>Packaging</b>	Must be in suitable packaging for handling, transport and storage, that will withstand normal handling, under the expected weather conditions.

Australian Chemical Control Schemes			
NICNAS – AICS	Not applicable		
National Registration Authority -	Ag & Vet Chemicals	Not applicable	
Therapeutic Goods Administration -	Medicines	Comply	
Australian & New Zealand Food Authority -	Food	Not applicable	
Chemicals Weapons Act	Not applicable	Ozone Depleting Substance Act	Not applicable

### Section 16 - OTHER INFORMATION

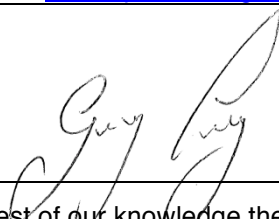
Acronyms Used	
ADG Code	Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road and Rail
ASCC	Australian Safety & Compensation Council (became Safe Work Australia in April 2009, and administers NOHSC documents]
NOHSC	Australian National Occupational Health and Safety Commission (for documents only)
WHS	Workplace Hazardous Substance
CAS No.	Chemical Abstracts Service Registry Number
UN No.	United Nations Dangerous Goods Number

### MSDS Dates and Revisions

MSDS Original Preparation Date : 30<sup>th</sup> June 2003, 18<sup>th</sup> May 2009, 17 July 2015, 9th May 2017  
MSDS Latest Revision Date : 27 June 2017  
Key changes in Latest Revision : formatting  
MSDS reviewed and reissued : 27 June 2017

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MSDS APPROVED :



This MSDS summarises to the best of our knowledge the health and safety hazard information on the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.