Material Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **PHYTOAMINE BIOCOMPLEX FREE RADICAL SCAVENGER**

Recommended Use: Cosmetic applications.

Supplier: Bronson & Jacobs Pty Ltd
ABN: 81 000 063 249
Street Address: 70 Marple Avenue
Villawood NSW 2163
Australia
Telephone Number: +61 2 8717 2929
Facsimile: +61 2 9755 9611

Emergency Telephone: **1 800 033 111 (ALL HOURS)**

2. HAZARDS IDENTIFICATION

Based on available information, not classified as hazardous according to criteria of ASCC; NON-HAZARDOUS SUBSTANCE.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Poisons Schedule: None allocated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Description: * proportion not disclosed by supplier

Components / CAS Number	Proportion	Risk Phrases
Propylene glycol 57-55-6	* (EINECS No. 200-338-0)	-
Ginkgo biloba extract 90045-36-6	* (EINECS No. 289-896-4)	-
L-Leucine 61-90-5	* (EINECS No. 200-522-0)	-
L-Valine 72-18-4	* (EINECS No. 200-773-6)	-
L-Tyrosine 60-18-4	* (EINECS No. 200-460-4)	-

L-Arginine 74-79-3	* (EINECS No. 200-811-1)	-
L-Lysine 56-87-1	* (EINECS No. 200-294-2)	-
L-Cysteine 52-90-4	* (EINECS No. 200-158-2)	R22

4. FIRST AID MEASURES

Inhalation: Remove victim from area of 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. Seek medical advice if effects persist.

Skin Contact: If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

Eye Contact: If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical assistance.

Medical attention and special treatment: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazards from combustion products: Combustible liquid.

Precautions for fire fighters and special protective equipment: On burning will emit toxic fumes, including those of oxides of carbon . Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

Suitable Extinguishing Media: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures: If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and clean up: Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal

in properly labelled containers or drums for disposal. Wash area down with detergent and excess water.

7. HANDLING AND STORAGE

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

Conditions for safe storage: Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

Precautions for safe handling: Avoid skin and eye contact and breathing in vapour, mists and aerosols.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:
No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standard(s) for constituent(s):

Propane-1,2-diol (propylene glycol) (total: vapour & particulates): 8hr TWA = 474 mg/m3 (150 ppm); (particulates only): 8hr TWA = 10 mg/m3

As published by the National Occupational Health and Safety Commission.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological Limit Values
None allocated.

Engineering controls:
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. If inhalation risk exists: Use with local exhaust ventilation or while wearing organic vapour/particulate respirator. Keep containers closed when not in use.

Personal Protective Equipment:
The selection of PPE is dependant on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.

Wear overalls, safety glasses and impervious gloves. If risk of inhalation exists, wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Transparent to Opalescent Liquid
Colour:	Light Brown
Odour:	Characteristic
Solubility:	Soluble in water. Slightly soluble in alcohol.
Specific Gravity:	1.080-1.120 @20°C
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	Not available.
Flash Point (°C):	>95
Autoignition Temperature (°C):	Not available
Melting Point/Range (°C):	Not available
Boiling Point/Range (°C):	Not available
Decomposition Point (°C):	Not available
pH:	Not available

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Avoid exposure to heat, sources of ignition, and open flame.
Incompatible materials:	Incompatible with strong oxidising agents.
Hazardous decomposition products:	Oxides of carbon. Carbonic anhydride.
Hazardous reactions:	Hazardous polymerisation will not occur.

Reacts violently with strong oxidising agents .

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects expected, however, large amounts may cause nausea and vomiting.

Eye contact: May be an eye irritant.

Skin contact: Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Inhalation: Breathing in vapour, mists or aerosols may produce respiratory irritation.

Long Term Effects:
No information available for the product.

Toxicological Data:
No LD50 data available for the product. For the constituent Propylene glycol :

Oral LD50 (rat):	20,000 mg/kg (2)
Dermal LD50 (rabbit):	20,800 mg/kg (2)

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Persistence/degradability and mobility
DBO 20 days: 79% eliminated (1)
DBO 28 days: 87-92% eliminated (1)
May penetrate in ground and contamintate water. (1)

Aquatic toxicity:

72hr EC50 (Green algae):	>19,000 mg/L (1)
48hr EC50 (Daphnia magna):	>43,500 mg/L (1)
96hr LC50 (fish):	(Stickleback) 23,800 mg/L (1)

13. DISPOSAL CONSIDERATIONS

Disposal methods: Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Normally suitable for incineration by an approved agent.

14. TRANSPORT INFORMATION

Road and Rail Transport
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification: Based on available information, not classified as hazardous according to criteria of ASCC; NON-HAZARDOUS SUBSTANCE.
Poisons Schedule: None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

(1) Supplier Material Safety Data Sheet; 10/ 2007.
(2) `Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinatti, 2008.

This material safety data sheet has been prepared by SH&E Shared Services, Orica.

Reason(s) for Issue:
First Issue Primary MSDS

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Bronson & Jacobs Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Bronson & Jacobs Pty Ltd at the contact details on page 1.

Material Safety Data Sheet

Bronson & Jacobs Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris.