



MATERIAL SAFETY DATA SHEET

MSDS Number: PBA-3A

Date of Issue: 16 April 2008

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

N-Prove[®] granular chickpea inoculant

Recommended Use:	Mesorhizobium Inoculant	Product Code:	NA
Supplier:	Philom Bios Australia Pty Ltd	ACN / ABN:	119 069 617
Address:	Plant Genomic Centre Hartley Grove Urrbrae SA 5064	Telephone:	1800 178 263
Email:	sgleddie@philombios.ca	Facsimile:	(08) 8338 6949
Contact:	Sanford Gleddie	Website:	www.philombios.ca
		Emergency Telephone Number:	1800 178 263

2. HAZARDS IDENTIFICATION

Hazard Classification:	NON HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD
Risk Phrases:	None allocated
Safety Phrases:	None allocated
Emergency Overview:	None allocated

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (g/kg):
Pure culture of <i>Mesorhizobium ciceri</i> bacterium	Not relevant	Low
Peat Granule	Not relevant	High
Water	7732-18-5	High

VHigh > 60%, High 30-60%, Med 10-29%, Low < 10% (w/w)

Note: The active ingredients of this product are naturally occurring substances which most humans and livestock are exposed to on a routine basis without harm or significant effect.

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (Telephone 13 11 26), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

Inhalation: Prolonged or repeated exposure may cause injury to the respiratory tract. Move individual to fresh air. Encourage coughing. Get medical attention if breathing difficulty develops.

Skin Contact: Low hazard for usual handling. A single prolonged exposure is not likely to result in

this material being absorbed in harmful amounts. Do not expose open cuts or wounds to this product. Wash with plenty of soap and water.

Eye Contact: Contact may cause eye irritation. If in eyes, flush with a continuous gentle stream of water for 5 minutes. If irritation develops, get medical attention.

Ingestion: Small amounts swallowed incidental to industrial handling are not likely to cause injury. Ingestion of larger amounts may cause stomach discomfort or pain. If swallowed, do not induce vomiting unless instructed to do so by qualified medical personnel. If individual is conscious, give plenty

of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if stomach discomfort develops.

First Aid Facilities: Provide washing facilities in the workplace.

Medical Attention: Employ supportive care. Treatment should be based on the judgment of the physician in response to reactions of the patient.

Aggravated Medical Conditions Caused by Exposure: None.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media appropriate for controlling the surrounding fire.

Hazards from Combustion Products: None known.

Special Protective Precautions and Equipment for Fire Fighters: Fire fighters should wear full protective clothing and self-contained breathing apparatus (AS1716:2000).

Hazchem Code: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Wear suitable protective clothing and boots.

Methods and Materials for Containment and Clean Up Procedures: Sweep up spills and store in a suitable container until proper disposal can be arranged. Do not smoke, eat or drink during clean up operation.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Practice reasonable caution to avoid contact with this product. Avoid breathing dust if generated. Users should wash hands before eating, drinking, chewing gum, using tobacco or the toilet. Keep out of reach of children.

Conditions for Safe Storage, including any Incompatibilities: Store any unused product in original unopened containers at temperatures below 20°C, away from sunlight, drafts and direct heat sources. Do not ship or store this product with food, feed, drugs or clothing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards: Exposure standards have been assigned by NOHSC as follows:

Mesorhizobium ciceri: None

Peat Granule: None.

Biological Limit Values: No biological limit allocated.

Engineering Controls: Good ventilation is required.

Personal Protective Equipment (PPE):

Breathing: Use an approved air-purifying respirator if respiratory irritation is experienced.

Protective Clothing: Wear clean body-covering clothing and impervious gloves when handling this product.

Eyes: Use safety glasses.

Other Protection: None specified.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark brown to black granules

Odour: None

pH: No data available

Vapour Pressure: Not applicable

Vapour Density: Not applicable

Boiling Point: Not applicable

Freezing / Melting Point: Not applicable

Solubility: Not soluble

Density: 0.7 g/cm³

Flash Point: Not flammable

Flammability (explosive) Limits: Not applicable

Auto-Ignition Temperature: Not applicable

Octanol/Water Partition Coefficient: No data available

Particle Size: 16 -30 mesh

10. STABILITY AND REACTIVITY

Chemical Stability: Product is stable. Not flammable under normal conditions of use.

Conditions to Avoid: None known.

Incompatible Materials: Do not store in direct contact with strong oxidizers, pesticides or chemical fertilizers.

Hazardous Decomposition Products: None known.

Hazardous Reactions: Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:

Inhalation: Prolonged or repeated exposure may cause injury to the respiratory tract.

Skin Contact: Peat and graphite dust may cause skin irritation.

A single prolonged exposure is not likely to result in this material being absorbed in harmful

amounts. Do not expose open cuts or wounds to this product.

Eye Contact: Contact may cause eye irritation.

Ingestion: Small amounts swallowed incidental to industrial handling are not likely to cause injury. Ingestion of larger amounts may cause stomach discomfort or pain.

Acute Effects: Not a likely hazard.

Chronic Effects: Not a likely hazard.

Cancer: Not a likely hazard.

Birth Defects: No data available.

Reproductive Effects: No data available.

Mutagenic Effects: No data available.

Animal Toxicity Data: No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Aquatic Toxicity (including Fish, Daphnia & Algae): No data available. Not a likely hazard.

Bird Toxicity: No data available. Not a likely hazard.

Bee Toxicity: No data available. Not a likely hazard.

Persistence and Degradability: No data available.

Mobility: No data available

13. DISPOSAL CONSIDERATIONS

Disposal Methods: N-Prove may be disposed of by placement in any landfill approved for domestic waste.

Special Precautions for Landfill or Incineration: None.

14. TRANSPORT INFORMATION

UN Number: Not applicable

UN Proper Shipping Name: Not applicable

Class and Subsidiary Risk: Not classified as a "dangerous goods" for transport by road or rail according to the Australian Dangerous Goods Code for Transport by Road and Rail.

Packing Group: Not applicable

Special Precautions for User: None

Hazchem Code: None allocated

Material For Export: This product is not regulated as a hazardous material for all modes of transportation within the USA and Canada.

15. REGULATORY INFORMATION

SUSDP: Not scheduled

APVMA: Registration not required.

International Regulatory Information: Registration not required.

16. OTHER INFORMATION

Date of Preparation or Revision: Initial edition

Data Sources: Manufacturer product safety data and published data

Abbreviations and Acronyms: APVMA – Australian Pesticides and Veterinary Medicines Authority

NOHSC – National Occupational Health and Safety Commission

SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons

TWA - Time Weighted Average

Trademark Information: ® N-Prove is a Registered Trademark of Philom Bios Inc.

Notice: The information contained in this Material Safety Data Sheet is presented in good faith and is believed to be accurate as of the effective date shown above. However, no other warranty, expressed, or implied, is given.

This information may not be adequate for every application and therefore it is up to the user to determine the suitability of this information based on conditions of use, storage or local regulations.

END OF MSDS