



MATERIAL SAFETY DATA SHEET

BIOTIS ATRAZINE 900WG HERBICIDE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	BIOTIS ATRAZINE 900WG HERBICIDE
Product Type	Group C Herbicide
Company Name	BIOTIS LIFE SCIENCE PTY LTD
Address	11 Norfolk Way, North Ryde, NSW 2113, Australia.
Telephone Number	02 9889 1995
Fax Number	02 9889 1998
Recommended Use	For selective annual grass and broadleaf weed control as per directions for use table.

2. HAZARDS IDENTIFICATION

Hazard Classification	Hazardous according to the criteria of NOHSC Australia. Not classified as Dangerous Goods according to the ADG code.
Risk Phrase(s)	R43 May cause sensitization by skin contact. R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
Safety Phrase(s)	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S24 Avoid contact with skin. S36/37 Wear suitable protective clothing and gloves. S46 If swallowed, seek medical advice immediately and show this container or label.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS Number</u>	<u>Proportion</u>
Atrazine	1912-24-9	900 g/kg
Other non hazardous ingredients	-	Balance

4. FIRST AID MEASURES

Inhalation

Remove affected person to fresh air until recovered.

Skin Contact

Wash affected areas thoroughly with soap and water. If irritation persists, seek medical advice.

Eye Contact

If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

Seek medical advice immediately.

Ingestion

If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre (Phone number: 13 112). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical.

Hazardous from Combustion Products

If involved in a fire, it will emit toxic fumes of cyanides, hydrogen chloride and possibly carbon oxides.

Special Protective Equipment for Fire Fighters

Breathable air apparatus must be worn when fighting a fire in which this product is involved.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal

Recover the product by sweeping up or vacuuming without raising dust. Collect in sealed open top containers for disposal. Final clean up with degreasing agent or detergent is advised.

Environmental Precautions

Prevent from entering drains, waterways or sewers.

7. HANDLING AND STORAGE

Handling

For personal protective equipment (PPE) and hygiene advice, refer Section 8.

Storage and Transport

Store in the closed original container in a dry, well-ventilated area out of direct sunlight.

Keep container tightly sealed and do not store with seed, fertilizers or foodstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

NOHSC has set the following exposure standard for atrazine : TLV (TWA) 5 mg/m³.

Engineering Controls

Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment

When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and goggles.

Hygiene Measures

After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off white granules
Odour	Non-specific
Vapour Pressure	0.04m Pa (20°C)
Volatility	Non-volatile
Solubility in water	Suspension in water
Explosivity	Non-explosive

10. STABILITY AND REACTIVITY

Stability	Stable for at least 2 years under normal conditions of warehouse storage.
Incompatible Material	Corrosive to mild steel, galvanized steel and zinc. Non corrosive to stainless steel, polyethylene and plastics. Do not mix, store or apply the product or spray solutions of the product in galvanized steel or unlined steel (except stainless steel) containers or spray tanks.
Hazardous Reactions	Avoid contact of the concentrate with strong acids or alkaline materials.
Hazardous Polymerization	Hazardous polymerization is not possible

11. TOXICOLOGICAL INFORMATION

No harmful effects are expected if the precautions on the label and this MSDS are followed.

Inhalation

Respiratory protection while spraying is recommended. Some temporary irritation may be experienced.

Ingestion

Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.

Skin

May irritate the skin. May cause sensitization by prolonged skin contact.

Eye

May irritate the eyes.

Chronic Effects

No information available, no chronic effects expected.

Carcinogenicity

Atrazine has been listed by IRAC as a Class 3, not classifiable as to carcinogenicity to humans.

Acute Toxicity-Oral : LD₅₀ (rat) : 1869-3080 mg/kg ; 1750-3992 mg/kg @ mice (technical)

Acute Toxicity-Dermal : LD₅₀ (rabbit) : 7500 mg/kg

LD₅₀ (rat) : >3100 mg/kg

Acute Toxicity-Inhalation : LC₅₀ Inhalation (rat) : >5.8 mg/L (4 hours)

Other Information

The Australian Acceptable Daily Intake (ADI) for atrazine for a human is 0.005 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.5 mg/kg/day, the level determined to show no effects during long-term exposure for the most sensitive indicators and the most sensitive species.

(Ref: Comm. Dept. of Health and Ageing, \pm ADI List \emptyset December 2008)

12. ECOLOGICAL INFORMATION

Persistence/Biodegradability

Average field half life of atrazine is 35-50 days. This may be longer under cold or dry conditions.

Environment Protection

Marine pollutant.

Acute Toxicity-Fish	LC ₅₀ (96 h) Rainbow trout: 4.5-11.0 mg/L LC ₅₀ (96 h) Bluegill sunfish: 16 mg/L LC ₅₀ (96 h) Carp: 76 mg/L LC ₅₀ (96 h) Catfish: 7.6 mg/L LC ₅₀ (96 h) Perch: 16 mg/L LC ₅₀ (96 h) Guppies: 4.3 mg/L
Acute Toxicity-Daphnia	EC ₅₀ (48 h) Daphnia : 6.9 mg/L
Acute Toxicity-Bird	Not toxic to birds LD ₅₀ Ducks: >10000 mg/kg @ adult peking ducks LD ₅₀ Bobwhite quail: 940 mg/kg LD ₅₀ Bobwhite quail: 5760 mg/kg (8 day dietary) LD ₅₀ Mallard ducks: 19650 mg/kg diet (80% WP)
Acute Toxicity-Bees	Not toxic to bees LD ₅₀ Bees: >100 μ g/bee (contact)
Other beneficial spp.	LC ₅₀ (14 d) Earthworms: 78 mg/kg soil

13. DISPOSAL CONSIDERATIONS

Product Disposal

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals.

Container Disposal

Do not use this container for any other purpose. Shake the last amount of product from the bag into application equipment. Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in landfill in accordance with local regulations.

Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.



15. REGULATORY INFORMATION

Poisons Schedule	S5
Packaging and Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

16. OTHER INFORMATION

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user must review this information in the specific context of the intended application. BIOTIS LIFE SCIENCE PTY LTD. will not be responsible for damages of any nature resulting from use of or reliance upon this information.
