

# MATERIAL SAFETY DATA SHEET

# **BIOSORB 600 HERBICIDE**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	BIOSORB 600 HERBICIDE	
Product Type	Group I 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 the control of a range of woody weeds and melons as specified in the directions for use table.	
2. HAZARDS IDENTIFICATION		
Hazard Classification	Classified as hazardous according to the criteria of NOHSC Australia.	
	Not classified as Dangerous Goods according to the ADG code.	
Risk Phrase(s)	R22 Harmful if swallowed	
	R36/38 Irritating to eyes and skin	
	R43 May cause sensitization by skin contact	
Safety Phrase(s)	S13 Keep away from food, drink and animal feeding stuffs	
· ()	S2 Keep out of reach of children	
	S24/25 Avoid contact with skin and eyes	
	S46 If swallowed, seek medical advice immediately and show this container or label	

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	CAS Number	<b>Proportion</b>
Triclopyr (present as butoxtethyl ester)	64700-56-7	600 g/L*
Other ingredients	-	Balance
*This concentration is for the active ingredient triclopyr		

# 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 or fine spray, CO<sub>2</sub>, dry chemical and soft water spray or foam.

#### **Hazardous from Combustion Products**

If involved in a fire, it will emit oxides of carbon, oxide of nitrogen, hydrogen chloride and possibly phosgene.

## **Special Protective Equipment for Fire Fighters**

Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

## 6. ACCIDENTAL RELEASE MEASURES

#### **Spills and Disposal**

Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite).

Collect spilled material and waste in sealable open-top type containers for disposal.

Do not use water for cleanup.

#### **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 cool, 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**

No exposure standard has been established for this product.

#### **Engineering Controls**

Well ventilated

## **Personal Protective Equipment**

When preparing product for use, wear elbow-length PVC gloves and face shield or goggles.

When using controlled droplet applicator, wear protective waterproof clothing and impervious footwear.

## **Hygiene Measures**

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



Appearance	Light brown liquid	
Odor	Aromatic adour	
Physical state	Liquid	
Melting point	Liquid at normal temperature	
Solubility in water	Emulsifiable	
Specific gravity	$1.20\pm0.01$	
10. STABILITY AND REACTIVITY		
Stability	Stable for at least 2 years under normal conditions of warehouse storage.	
Incompatible Material	Specific materials to avoid 6 Strong, oxidising agents	
Hazardous Decompositions Products	Carbon dioxide and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and under some circumstances, oxides of nitrogen. Oxides of sulfur. Hydrogen fluoride gas and fluorides.	
Hazardous Polymerization	Not known to occur	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

# 11. TOXICOLOGICAL INFORMATION

## **Potential Health Effects:**

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

## Inhalation

High vapor concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract.

#### Ingestion

Ingestion of the concentrate in relatively large amounts can result in headache, nausea, lethargy, motor weakness and in coordination.

## Skin

May irritate the skin.

May cause sensitization by prolonged skin contact.

## Eye

Will irritate the eyes.

## **Chronic Effects**

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

## **Reproductive Toxicity**

In laboratory animaløs studies, effects on reproduction have seen only at doses that produced significant toxicity to the parent animals.



## Carcinogenicity

Triclopyr has been assessed in animals and some data exists shown that triclopyr is a substance which causes some concern for humans owing to possible carcinogenic effects from long term exposure, but in respect of which the available information is not adequate for making a satisfactory assessment.

Acute Toxicity-Oral	: $LD_{50}$ (rat) : 577 mg/kg @ female ; 692 mg/kg @ male
Acute Toxicity-Dermal	: $LD_{50}$ (rat) : > 2000 mg/kg
Acute Toxicity-Inhalation	: $LC_{50}$ Inhalation : > 256 ppm (4 hours)
Eye Irritation	

The product is an eye irritant

## **Skin Irritation**

The product is slight irritant

## Skin Sensitisation

Product is not a skin sensitizer

## **Other Information**

The Australian Acceptable Daily Intake (ADI) for triclopyr 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, :ADI Listø, TGA, June 2006)

# **12. ECOLOGICAL INFORMATION**

## Persistence/Biodegradability

Triclopyr butoxyethyl ester is rapidly hydrolysed to triclopyr acid in soil and water. Triclopyr acid is degraded by microbial action and photodecomposition.

Breakdown in soil: Half life about 40 days in soil.

Breakdown in water: Decomposes rapidly in water with a half life 1-2 days.

## **Environment Protection**

Do not contaminate dams, waterways or sewers with this product.

Acute Toxicity-Fish	$LC_{50}$ (96 h) Rainbow trout: 117 mg/L
·	LC <sub>50</sub> (96 h) Bluegill Sunfish: 148 mg/L
Acute Toxicity-Daphnia	EC <sub>50</sub> (48 h) Daphnia : 133 mg/L
Acute Toxicity-Bird	LD <sub>50</sub> Mallard duck: 1698 mg/kg
Acute Toxicity-Bees	Not toxic to bees
	$LD_{50}$ Bees: >100 µg/bee

# **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. Triple rinse containers; add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.

Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for the refill or storage. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree root.

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.

UN Number (Sea Transport)	3082	
IMO Class/Packing Group	9	
IMO Marine Pollutant	Marine Pollutant	
IMO Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S	
	(contains Triclopyr)	
15. REGULATORY INFORMATION		
Poisons Schedule	\$6	
Packaging and Labelling	POISON	
	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.