

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY INDENTIFICATION

Product name:	Turbodor 29 MPA HERBICIDE
Chemical name:	Triclopyr Butoxy Ethyl Ester 40g/l (a.i.)
Formulation type:	RTU/MPA
Supplier:	Future Farm & Forest Services & Supplies (Pty) Ltd
	P O BOX 98165
	SLOANE PARK
	2152
	Tel: +27 11 463 5842
Spillages:	Emergency Telephone – 083 677 0704
Poisonings:	Griffon Poison Information Centre - 082 446 8946
	Tygerberg Poison Information Centre – 021 931 6129
	UOFS Pharmacology/Toxicology information Centre – 082 491 0160

2. COMPOSTION/INFORMATION ON INGREDIENTS

COMPONENTS CONTRIBUTING TO HAZARD:

:29g/L (a.e.)
(40g/L (a.i.)
: balance
: 3082



3. HAZARDS INDENTIFICATION

Harmful if swallowed. Irritating to skin. May cause sensitization by skin contact Harmful to aquatic organisms

4. FIRST-AID MEASURES

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

Ingestion

Do NOT induce vomiting. Call a physician and/or transport to emergency facility immediately. The decision of whether to induce vomiting or not should be made by an attending physician.

Eye contact

Irrigate immediately with water for at least 5 minutes.

Skin contact

Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse.

Inhalation

Remove patient to fresh air, consult a physician

Note to physician

No specific antidote. If lavage is preformed, suggest endotracheal and /or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.

Supportive care. Treatment based on judgment of physician in response to symptoms of patient.

5. FIRE FIGHTING MEASURES

Extinguishing media

Water or fog or fine spray. Carbon dioxide. Dry chemical. Foam.

Hazardous combustion products

Nitrogen oxides. Hydrogen chloride. Phosgene. Dependent on the intensity of the fire.

Protection of firefighters

Wear protective clothing and use self-contained breathing apparatus.

Additional information

Keep containers cool by spraying with water. Contain runoff to prevent entry into water or drainage systems.



6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear appropriate safety clothing and eye/face protection (see section 8)

Environmental precautions

Do not wash into sewers or into any body of water, advise water authority if spillage has entered water course or drainage system.

Methods of cleaning up

Soak up all with sand or other non-combustible absorbent material and place into containers for disposal. For large spills, barricade area and consult manufacturer. If further assistance is require, telephone the emergency contact number.

7. HANDLING AND STORAGE

HANDLING

Use good personal hygiene. Do not consume or store food in the work area. Wash hands and exposed skin before eating, drinking or smoking and after work. Avoid eye and skin contact.

STORAGE

Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store near food, drink, animal feeding stuffs, Pharmaceuticals, cosmetics or fertilizers. **KEEP OUT OF REACH OF CHILDREN.**

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective limit value. Ensure that eyewash stations and safety showers are proximal to the work station location.

HYGIENE MEASURES

Wash hands after handling compounds and before eating, smoking, using the lavatory and at the end of the day.

OCCUPATIONAL EXPOSURE LIMITS

Not available



PERSONAL PROTECTIVE EQUIPMENT

Respiratory system

Wear appropriate respirator when ventilation is inadequate.

Skin and body

For brief contact, no precautions other than clean body-covering clothing and impervious gloves should be needed. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.

For emergency conditions use protective clothing impervious to this mataerial. Selection of specific items will depend on operation.

<u>Hands</u>

Wear protective gloves

<u>Eyes</u>

Wear splash goggles

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE COLOR ODOR MELTING POINT	 : Liquid : Chestnut : Strong Chemical Odour : May start to solidify at -42°C (-43.6°F) based on data for Triclopyr butoxy ethyl ester.
DENSITY	: 0.89g/ml g/cm3 at 20°C (68 ^o f)
VAPOUR DENSITY	: The highest known value is 12.3 (air = 1) (Triclopyr butoxy ethyl ester)
VAPOUR PRESSURE	: The highest known value is 0 kPa (at 20°C) (Triclopyr butoxy ethyl ester) (mmHg) 2 (approximate) @ 68°F (20.0°C)(solvent)
pH FLASH POINT	: 4.09. 5.02 in Aqueous Dilution. : > 93.0°C (200 ^o f)

10. STABILITY AND REACTIVITY

Stability

The product is stable. Prevent oxidation by avoiding long-term exposure to air.

Materials to avoid

Reactive with oxidizing agents, acids, alkalis.

Strong acids and bases; reactive metals; copper alloys; and oxidizing agents, including acidic clays, peroxides, halogens, vinyl chloride, and iodine pentafluoride (solvent)

Hazard decomposition products

Carbon oxides (CO, CO₂) nitrogen oxides (NO, NO₂) halogenated compounds.



11. TOXICOLOGICAL INFORMATION

LOCAL AFFECTS

Skin Irritation: Hazardous in the case of skin contact (irritant)
Eye irritation: Hazardous in the case of eye contact (irritant)
Sensitization: Hazardous in the case of skin contact (sensitizer)
Acute toxicity: Acute oral toxicity (LD50): 1150mg/kg [Rat]. (Nuvogon butoxy ethyl ester)
Chronic toxicity: Repeated or prolonged exposure is not known to aggravate medical condition.

12. ECOLOGICAL INFORMATION

ECOTOXCITY

Triclopyr butoxy ethyl ester 0.7mg/l, 96 hours [FISH] VERY toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

ENVIROMENTAL HAZARDS

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Practically non-toxic to birds on an acute basis Non-toxic to bees

13. DISPOSAL CONSIDERATIONS

METHODS OF DISPOSAL; WASTE OF RESIDUES; CONTAMINATED PACKAGING

Waste must be disposed of in accordance with governmental and local environmental control regulations.

WASTE CLASSFICATION

Not applicable

14. TRANSPORT INFORMATION

INTERNATIONAL TRANSPORT REGULATIONS

UN number: 3082LAND - ROAD/RAILWAY: environmentally hazardous substance. Liquid, n.o.s.Proper shipping name: environmentally hazardous substance. Liquid, n.o.s.ADR/RID Class: class 9: Miscellaneous substances.Packaging Group: IIISEA: environmentally hazardous substance. Liquid, n.o.s.Proper shipping name: environmentally hazardous substance. Liquid, n.o.s.

Po Box 98165 Sloane Park 2152 Gauteng. Tel & Fax: (011) 463 5842 Email: info@futurefarmforest.co.za Director: R D Forsyth-Thompson (Managing) Reg. 1998/014639/07



IMDG Class IMDG page number Packaging group IMDG label Marine pollutant	: class 9: miscellaneous substances. Marine pollutant : 9028 : III : : IMDG class: marine pollutant. (Pollutant)
<u>AIR</u> Proper shipping name UN/ID Number IATA-DGR Class	: Environmentally hazardous substance, liquid, n.o.s : 3082 : class 9: miscellaneous substances
INLAND WATERWAYS Proper shipping name	: environmentally hazardous substance, liquid, n.o.s.

(Triclopyr butoxy ethyl ester)

ADNR Classification UN/ID (EUROPE) ADNR Packaging group

: Class 9: miscellaneous substances.

- : 3082
- : 111

15. REGULATORY INFORMATION

EU REGULATIONS

Hazard symbol(s) Classification Risk Phrases	Xn - Harmful Harmful, dangerous for the environment R36/38 – Irritating to the eyes and skin. R43-May cause sensitization by skin contact R50/53- VERY toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. R65- harmful: may cause lung damage if swallowed.
Safety phrases	 S2- KEEP OUT OF REACH OF ALL CHILDREN S24- avoid contact with skin S37- wear suitable gloves S46-if swallowed seek medical advice immediately and show this container or label. S56- dispose of this material and its container at hazardous or special waste collection point. S 64- if swallowed, rinse mouth with water (only if patient is conscious.
Contains	: - Triclopyr butoxy ethyl ester solvent : - solvent
Product use	: Classification ad labeling have been performed according to EU directives 67/548/EEC, 88/379/EEC including amendments and the intended use. Consumer applications



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 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.

Revised: Jan 2017