

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**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:**

Triclopyr-2- :29g/L (a.e.)

Butoxy ethyl ester (40g/L (a.i.)

Solvent plus inert : balance

Ingredients

NIOSH/RTECS NO

UN no : 3082

### 3. HAZARDS IDENTIFICATION

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 performed, 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 material. Selection of specific items will depend on operation.

### **Hands**

Wear protective gloves

### **Eyes**

Wear splash goggles

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL STATE</b>	: Liquid
<b>COLOR</b>	: Chestnut
<b>ODOR</b>	: Strong Chemical Odour
<b>MELTING POINT</b>	: May start to solidify at -42°C (-43.6°F) based on data for Triclopyr butoxy ethyl ester.
<b>DENSITY</b>	: 0.89g/ml g/cm <sup>3</sup> at 20°C (68°F)
<b>VAPOUR DENSITY</b>	: The highest known value is 12.3 (air = 1) (Triclopyr butoxy ethyl ester)
<b>VAPOUR PRESSURE</b>	: The highest known value is 0 kPa (at 20°C) (Triclopyr butoxy ethyl ester) (mmHg) 2 (approximate) @ 68°F (20.0°C)(solvent)
<b>pH</b>	: 4.09. 5.02 in Aqueous Dilution.
<b>FLASH POINT</b>	: > 93.0°C (200°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, CO<sub>2</sub>) nitrogen oxides (NO, NO<sub>2</sub>) 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

### ECOTOXICITY

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.

### ENVIRONMENTAL 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 CLASSIFICATION**

Not applicable

## 14. TRANSPORT INFORMATION

### INTERNATIONAL TRANSPORT REGULATIONS

UN number : 3082

### LAND – ROAD/RAILWAY

Proper shipping name : environmentally hazardous substance. Liquid, n.o.s.  
ADR/RID Class : class 9: Miscellaneous substances.  
Packaging Group : III

### SEA

Proper shipping name : environmentally hazardous substance. Liquid, n.o.s.

IMDG Class : (Triclopyr butoxy ethyl ester)  
: class 9: miscellaneous substances. Marine pollutant  
IMDG page number : 9028  
Packaging group : III  
IMDG label :  
Marine pollutant : IMDG class: marine pollutant. (Pollutant)

### **AIR**

Proper shipping name : Environmentally hazardous substance, liquid, n.o.s  
UN/ID Number : 3082  
IATA-DGR Class : class 9: miscellaneous substances

### **INLAND WATERWAYS**

Proper shipping name : environmentally hazardous substance, liquid, n.o.s.  
ADNR Classification : Class 9: miscellaneous substances.  
UN/ID (EUROPE) ADNR : 3082  
Packaging group : III

## **15. REGULATORY INFORMATION**

### **EU REGULATIONS**

Hazard symbol(s) Xn - Harmful  
Classification Harmful, dangerous for the environment  
Risk Phrases 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