

**FARM-AG INTERNATIONAL (Pty) Ltd**

P.O. Box 1523, Durban 4000

**Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** FARMAG METRIBUZIN 480  
**Chemical name:** 4-amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,3-triazin-5(4H)-one  
**CAS No:** 21087-64-9  
**Chemical Family:** Triazinones  
**Chemical formula:** C<sub>8</sub>H<sub>14</sub>N<sub>4</sub>OS  
**Use:** A suspension concentrate herbicide for the control of various annual grasses and broadleaf weeds in sugarcane, potatoes, soyabeans and tomatoes.

**Creation Date:** October 2014**Revision Date:** August 2017**24 Hr Emergency Number:** 082 771 2712**In case of poisoning:**

Poison Information Centre: 082 446 8946

Tygerberg Hospital: (021) 931 6129

Poison Emergency Enquiries (021) 689 5227

**In case of Spillage:**

HAZMAT: 0800 147 112

**SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS**

Substance/Preparation : Preparation

Information on hazardous ingredients\*

Chemical Name	CAS No.	%	EC Number	Symbol	R-Phrases	
1) Metribuzin	21087-64-9		40-50	244-209-7	Xn, N	R22, R50/53

**SECTION 3 - HAZARD IDENTIFICATION****Physical/Chemical Hazards :** Not Applicable**Human health hazards:** Harmful if ingested.**SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS**First Aid Measures**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.**Skin Contact:** Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.Effects and symptoms**Inhalation:** May be fatal if inhaled.**Skin Contact:** Irritation of the product in case of skin contact: Not available. Sensitization of the product: Not available.**Aggravating conditions:** Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.**SECTION 5 - FIRE-FIGHTING MEASURES**Extinguishing Media**Suitable:** SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

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<b>Hazardous thermal (de)composition products</b>	carbon oxides (CO, CO <sub>2</sub> ) nitrogen oxides (NO, NO <sub>2</sub> ...) sulfur oxides (SO <sub>2</sub> , SO <sub>3</sub> ...).
<b>Special fire-fighting procedures:</b>	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
<b>Protection of fire-fighters:</b>	Be sure to use an approved/certified respirator or equivalent.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)**

<b>Personal precautions:</b>	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Environmental Precautions and:</b>	Poisonous liquid.
<b>Clean-up Methods</b>	Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**SECTION 7 - HANDLING AND STORAGE REQUIREMENTS**

<b>Handling:</b>	Keep locked up. Keep away from heat Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest Do not breathe gas/fumes! vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
<b>Storage:</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Packaging materials**Recommended:** Use original container.**SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**

<b>Engineering measures:</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Hygiene measures:</b>	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
<b>Occupational Exposure Limits:</b>	Not available.

Personal protective equipment

<b>Respiratory system:</b>	Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
<b>Skin and body:</b>	Lab coat
<b>Hands:</b>	Gloves.
<b>Eyes:</b>	Safety glasses.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state:</b>	Liquid.
<b>Color:</b>	Beige.
<b>Odour:</b>	Not available.
<b>Density:</b>	1.145 g/cm <sup>3</sup> at 20°C
<b>Solubility:</b>	Easily soluble in cold water, acetone. Soluble in methanol.
<b>pH:</b>	6.8
<b>Viscosity:</b>	Dynamic: 790 cP

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**SECTION 10 - STABILITY AND REACTIVITY**

**Stability:** The product is stable.  
**Hazardous Decomposition:** carbon oxides (CO, CO<sub>2</sub>) nitrogen oxides (NO, NO<sub>2</sub>...) sulfur  
**Products:** oxides (502, 503...).

**SECTION 11 - TOXICOLOGICAL INFORMATION**Local effects

**Eye irritation:** Non-irritating to the eyes.  
**Acute toxicity:** Acute oral toxicity (LD50): 510 mg/kg [Rat]. (Metribuzin).  
**Acute dermal toxicity (LD50):** >20 000 mg/kg [Rat]. (Solvent).  
**Chronic toxicity:** Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity :** Metribuzin:  
 4.5 to 35 mg/l, 48 hours [*Daphnia*]  
 0.021 mg/l, 72 hours [Algae]  
 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**SECTION 13 - DISPOSAL CONSIDERATION**

**Methods of disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.  
**Waste Classification:** Not applicable.

**14. TRANSPORT INFORMATION**

International transport regulations

**UN number:** 3082Land - Road/Railway

**Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s.  
**ADR/RID Class:** Class 9: Miscellaneous substances.  
**ADR/RID Iteni number:** 90  
**Packing Group:** III

Sea

**Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s.  
**IMDC Class:** Class 9: Miscellaneous substances. Marine pollutant  
**IMDG Page Number:** 9028  
**Packing Group:** III

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/NA (Europe) ADNR:** 3082  
**Packing Group:** III

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## 15. REGULATORY INFORMATION

EU Regulations

**Classification:** Harmful, Dangerous for the environment

**Risk Phrases:** R22- Harmful if swallowed.

R50153- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases:** S2- Keep out of the reach of children.

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.

**Contains:** Metribuzin

## 16. OTHER INFORMATION

All the information and instructions provided in this Material Safety Data Sheet are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. No responsibility will be accepted for errors or omissions or the consequence thereof. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that all people who may use, handle, dispose or in any way come into contact with the product understands this information.