

BRUTUS

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: BRUTUS
Pesticide Classification: Herbicide
UN No.: 3082

Supplier

Enviro Bio-Chem (Pty) Ltd
Co. Reg. No.: 2013/194774/07
44 Kerk Street, Lichtenburg
North West, South Africa 2740

Registration Holder

Erintrade CC t/a RT Chemicals
Co. Reg. No.: CK2001/036403/23
44 Kerk Street, Lichtenburg
North West, South Africa 2740

Telephone: +27 87 231 7261
Fax: 086 541 7948
Website: www.envirobiochem.co.za

24 Hr Emergency Number: Bateleur: +27 83 123 3911

In case of Poisoning:

Poison Information Centre: +27 82 446 8946
Tygerberg Hospital: (+27 21) 931 6129
Poison Emergency Enquiries: (+27 21) 689 5227

Common Name: Metolachlor 915 g/l EC
Chemical Name: 2-chloro-6-ethyl-N- (2'-methoxy-1'-methylethyl) acet-o-toluidide
Empirical Formula: C₁₅H₂₂ClNO₂
CAS No.: 51218-45-2
RSA Reg. No.: L7993 Act/Wet No. 36 of/van 1947
Namibia Reg. No.: N-AR 1195

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
Metolachlor	≥ 915 g/l
Benoxacor (safener)	≥ 25 g/l
Inert Ingredients	≤ 60 g/l

3. HAZARD IDENTIFICATION

Hazard Class: WHO Class II -Moderately hazardous.

Main Hazard: Harmful by inhalation. May cause irritation to respiratory tract. Moderately toxic by ingestion.

Flammability: Non-flammable

Chemical Hazard: During a fire this product may release smoke and hazardous decomposition products.

Biological Hazard: Very toxic to aquatic organisms.

4. FIRST AID MEASURES AND PRECAUTIONS

If poisoning is suspected, do not wait for symptoms to develop. Contact a physician, the nearest hospital, or the nearest Poison Control Centre.

Symptoms of Human Poisoning: No signs and symptoms of poisoning are known or expected in humans.

First Aid Measures:

Skin Contact: In case of contact, immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

Eye Contact: In case of contact, immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Induce vomiting. Obtain medical attention immediately.

Inhalation: Remove patient to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult medical personnel.

Advice to Physician: Treat symptomatically.

Antidote: There is no specific antidote for poisoning with this product.

5. FIRE FIGHTING MEASURES

Flammability: Non-flammable

Extinguishing Agents: Water, Carbon Dioxide, Dry Chemical, Foam.

Firefighting: Keep out of smoke, cool exposed containers with water spray. Fight fire from upwind position. Use self-contained breathing equipment. Contain runoff by diking to prevent entry into sewers or waterways. Equipment or materials involved in pesticide fires may become contaminated.

Special Hazards: During a fire this product may release smoke and hazardous decomposition products.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal Precautions: Wear protective clothing. Avoid breathing vapours or spray drift. If necessary, wear a self-contained breathing apparatus.

Environmental Precautions: Prevent spilled material from entering drains or watercourses. Contain spill and absorb with earth, sand, clay or other absorbent material.

Spill: Isolate area and keep unauthorized people away. Do not walk through spilled material. Avoid breathing vapours and skin contact. Remove sources of ignition if combustible or flammable vapours may be present and ventilate area. Use recommended protective equipment to dike contaminated area with absorbent granules, soil, sand, etc. If large spill occurs, material should be recovered. Small spills can be absorbed with absorbent granules, spill control pads or any absorbent material. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with alcohol and caustic solution and/or detergent and water. Rinse with water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal according to Section 13 of this document. Contaminated soil may have to be removed and

disposed according to Section 13 of this document. Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: This chemical should be handled only in a hood. Eye shields should be worn. Use appropriate OSHA/MSHA approved safety equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours. Keep containers tightly closed.

Storage: Store in a cool dry area. Store away from excessive heat and open flame. Store in an area designated specifically for pesticides. Do not store near any material intended for use or consumption by humans.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Acceptable Daily Intake (ADI): 0.006 mg/kg body weight.

Engineering Controls: Use outdoors in a well-ventilated area. Comply with occupational safety, environmental, fire and other applicable regulations. Wear suitable personal protective equipment.

Personal Protective Equipment:

Clothing: Long-sleeved shirt, long pants, shoes plus socks, protective waterproof (impermeable) gloves. Employee must wear appropriate protective clothing and equipment to prevent prolonged skin contact with this product.

Gloves: Use chemical-resistant gloves to prevent dermal exposure.

Eye Protection: Goggles or a face-shield should be used when needed to prevent liquid splashes from getting into the eyes. Where there is any possibility that an employee's eyes may be exposed to this substance the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

Respirator: Under normal handling conditions no respiratory protection is needed. However, when respiratory protection is appropriate, use a respirator approved for pesticides by the National Institute for Occupational Safety and Health (NIOSH).

Other Protection: Do not eat, drink or smoke while handling this product. Prevent contamination of food, feeds, drinking water and eating utensils. After using this product wash hands and face before eating. Take extreme care to avoid drift. Wash accurately (preferably a shower) after work shift. Wash hands during breaks and at the end of the work with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour: Yellow-brown

Odour: Mild aromatic solvent odour.

Phase: Liquid

Water: ≤0.3%

pH value: 5.0-9.0

Stability: Conform to FAO specifications.

10. STABILITY AND REACTIVITY

Stability: This is a stable material.

Conditions to Avoid: None to specifically mention.

Incompatible Materials: Highly alkaline conditions for extended periods of time.

Decomposition Products: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity based on active ingredient toxicity.

Acute Oral LD₅₀ (rat): ≥2 267 mg/kg

Acute Dermal LD₅₀ (rabbit): >2 020 mg/kg

Acute Inhalation LC₅₀ (rat, 4 hr): 3.06 mg/l

Eye Irritation (rabbit): Causes slight conjunctival irritation. All effects reversible within 7 days.

Skin Irritation (rabbit): Slightly irritating to the skin.

Sensitization (guinea pig): No evidence of inducing delayed dermal sensitization.

Chronic Effects: Long-term exposure to low levels of the material is not known to cause any ill effects to humans. Metolachlor has not been shown to cause chromosome damage, birth defects or reproductive effects.

Carcinogenicity: In two separate studies in mice, metolachlor did not induce any cancer or other long-term toxic effects. Two long-term studies in rats produced no diseases except at extremely high doses where a small number of females developed benign liver tumours. This type of liver response is not uncommon in rats administered high doses of many compounds and may only reflect the extremely high dose used.

Mutagenicity: Non-mutagenic

Reproductive Hazard: In 2 generations of rats the overall the evidence suggests that metolachlor has little or no effect on reproduction at commonly encountered levels. In two long-term rat reproduction studies, mating, gestation, lactation and fertility were not affected at the low doses administered (50 mg/kg). However, pup weights and parental food consumption decreased at this low dose. Another two-year test caused the wasting of testicles at moderate doses (150mg/kg).

12. ECOLOGICAL INFORMATION

Ecotoxicity based on active ingredient toxicity.

Aquatic Toxicity Fish LC₅₀ (96 hr): 3.9 mg/l (rainbow trout). Toxic to fish

Aquatic Toxicity Daphnia EC₅₀ (48 hr): Very toxic to daphnia.

Aquatic Toxicity Algae EC₅₀ (5 days): Very toxic to algae.

Avian Toxicity LD₅₀: >2 510 mg/kg (mallard duck). Moderately toxic to birds.

Bee Toxicity LD₅₀: Slight stomach toxicity on bee, but no contact toxicity.

Biodegradability: DT₅₀ is about 20 days (field).

Bio-accumulation: No data available.

Mobility: No data available.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: Dispose of waste product as hazardous waste via a licensed disposal contractor to an approved landfill. Do not discharge into drains or sewers. Do not contaminate crops, grazing, rivers or dams with chemical or used containers. Follow container label directions for disposal of wastes generated during use in compliance with the FIFRA product label.

Package Product Wastes: Dispose of container as hazardous waste via a licensed disposal contractor to an approved landfill.

14. TRANSPORT INFORMATION

UN No.: 3082

Hazard Class: 9

Packing Group: III

Proper Shipping Name: Environmentally Hazardous Substance, Liquid. N.O.S. (contains Metolachlor)

15. REGULATORY INFORMATION

Risk Phrases: **R22-** Harmful if swallowed.
 R36/38- Irritation to eyes and skin.
 R43- May cause skin sensitisation by skin contact.
 R50- Very toxic to aquatic organisms.

Safety Phrases: **S1/2-** Keep locked up and out of the reach of children.

National Legislation: This product is registered under Act 36 of 1947 of the Republic of South Africa. It is a violation of South African law to use this product in any manner inconsistent with its approved labelling. Read and follow all label directions.

16. OTHER INFORMATION

Note: Read and understand all the information on the product label before using the product.

Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

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