

MATERIAL SAFETY DATA SHEET

ALACHLOR EC

Reg. No.: L 7328 (Act 36 of 1947) Date issued: 12-07-2005

COMPANY INFORMATION

Name: Meridian Agrochemical Company (Pty) Ltd
trading as Meridian Agritech

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Emergency telephone numbers: Poison Centre (Unitas Hospital): 012 – 664 1100
Toll free: 0800 111 229
Tygerberg: 021 – 931 6129
Red Cross: 021 – 689 5227

PRODUCT IDENTIFICATION

Trade name: ALACHLOR EC

Chemical abstract no: 15972-60-8

Chemical family: chloroacetanilide

NIOSH no: Not available

Chemical name:

Alachlor: 2-chloro-2',6'-diethyl-N-methoxymethylacetanilide

Hazchem code: Xn, Xi

Road/Rail: Class III

Reg. No.: L XXXX (Act 36 of 1947)

Molecular formula:

Alachlor: C₁₄H₂₀ClNO₂

Molecular weight:

Alachlor: 269.8

Synonyms: None

UN no: 1993

Form: Liquid (emulsion)

Colour: Amber

Odour: Sweet, Aromatic

COMPOSITION INFORMATION

COMPONENT	CAS NO.
Alachlor 384 g/lit	15972-60-8

HAZARDS IDENTIFICATION

Flammability: Flammable liquid.

Chemical hazard: The product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Biological hazard: The use of this product may be hazardous to your health. The product contains alachlor, which has been determined to cause tumours in laboratory animals. Danger: cause irreversible eye damage; cause skin irritation; may cause respiratory tract irritation; harmful if swallowed; may cause allergic skin reaction.

FIRST AID MEASURES

Health effects: eyes: Immediately flush with plenty of water. Continue for at least 15 minutes. If easy to do, remove contact lenses. Obtain medical attention from an eye specialist.

Health effects: skin: Immediately wash affected skin with plenty of water. Continue for at least 15 minutes. Take off contaminated clothing, wristwatch, jewellery. If spilled into boots, remove immediately. Wash clothes before re-use. Get medical

attention.

Health effects: ingestion: Immediately offer water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed by medical personnel. A physician or Poison Center can be contacted for advice.

Health effects: inhalation: Remove to fresh air.

Further medical treatment: Probable mucosal damage may contra-indicate gastric lavage.

FIRE FIGHTING MEASURES

Flash point: 39°C (closed cup).

Flammability: Combustible liquid.

Extinguishing media: Water, foam, carbon dioxide, dry chemical.

Specific fire fighting methods: Minimise use of water to prevent environmental contamination.

Special hazards: Carbon monoxide, nitrogen oxides and hydrogen chloride.

Protective clothing: Self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

ACCIDENTAL RELEASE MEASURES

Personal precautions: Eye protection: If there is potential for contact: wear chemical goggles.

Skin protection: Wear chemical resistant gloves. If there is potential for contact: Wear face shield. Wear chemical resistant clothing/ footwear. Applicators and other handlers must wear: Wear coveralls over long-sleeved shirt and long pants. Wear chemical resistant footwear plus socks. Follow manufacturer's instructions for cleaning/ maintaining personal protective equipment. If no such instructions for washables, use detergent and hot water.

Respiratory protection: If airborne exposure is excessive: Wear respirator. Full facepiece/ hood/ helmet respirators replace need for chemical goggles. Respiratory protection programs must comply with all local/ regional/ national regulations.

Cleaning procedure: Absorb in earth, sand or absorbent material. Dig up heavily contaminated soil. Collect in containers for reclamation or disposal. Wash spill area with detergent and water. Minimise use of water to prevent environmental contamination.

Disposal: Product: Keep out of drains, sewers, ditches and water ways. Recycle if appropriate facilities/equipment available. Excess product may be disposed of by agricultural use according to label instructions. For other disposal, this product is classified as hazardous by the Resource Conservation and Recovery Act, due to its toxicity and ignitability characteristics. Burn in a RCRA approved incinerator. Follow all local/regional/international regulations.

Container: See the individual container label for disposal information. Empty packaging completely. Triple or pressure rinse empty containers. Do not contaminate water when disposing of rinse waters. Rinsate may be disposed of by agricultural use according to label instructions. For other disposal, rinsate is classified as hazardous by the Resource Conservation and Recovery Act, due to its toxicity characteristics. Burn in a RCRA approved incinerator. Ensure packaging cannot be reused. Store for collection by approved waste disposal service. Recycle if appropriate facilities/equipment available. Observe all labelled safeguards until container is cleaned, reconditioned or destroyed.

Handling and storage: handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Do not taste or swallow. Ensure adequate ventilation. When using do not eat, drink or smoke. Wash hands thoroughly after handling or contact. Wash contaminated clothing before re-use. Thoroughly clean equipment

after use. Do not contaminate drains, sewers and water ways when disposing of equipment rinse water. Emptied containers retain vapour and product residue. Follow labeled warnings even after container is emptied. Do not cut, drill, grind or weld on or near this container.

Storage: Minimum storage temperature: 32°F ; Incompatible materials for storage: mild steel, PVC; Keep locked up and out of the reach of children; Keep away from living quarters; Keep away from food, drink and animal feed. Keep only in the original container; Keep away from sources of ignition (sparks, flame, etc.); Keep container tightly closed in a cool, well-ventilated place; Protect from frost; Partial crystallization may occur on prolonged storage below the minimum storage temperature; Minimum shelf life: 4 years; If froze, place in warm room and shake frequently to put back into solution.

Exposure control/personal: Engineering controls: Provide local exhaust ventilation. Have eye wash facilities immediately available at locations where eye contact can occur. Have safety shower available at locations where skin contact can occur.

Eye protection: If there is potential for contact: wear chemical goggles.

Skin protection: Wear chemical resistant gloves. If there is potential for contact: Wear face shield. Wear chemical resistant clothing/ footwear. Applicators and other handlers must wear: Wear coveralls over long-sleeved shirt and long pants. Wear chemical resistant footwear plus socks. Follow manufacturer's instructions for cleaning/ maintaining personal protective equipment. If no such instructions for washables, use detergent and hot water.

Respiratory protection: If airborne exposure is excessive: Wear respirator. Full facepiece/ hood/ helmet respirators replace need for chemical goggles. Respiratory protection programs must comply with all local/ regional/ national regulations.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber liquid with aromatic odour.

Boiling point: 270°F.

Density: 1.066 g/cm³ , 25° C

PH: not available.

Solubility: emulsifies in water.

STABILITY AND REACTIVITY

Stability: Stable under normal conditions of handling and storage.

Conditions to avoid: Keep away from sources of ignition (sparks, flame, etc.); Keep container tightly closed in a cool, well-ventilated place; Protect from frost; Keep out of reach of children.

Hazardous decomposition products: Thermal decomposition: Hazardous products of combustion: Carbon monoxide, nitrogen oxides and hydrogen chloride. When heated may give off toxic fume.

TOXICOLOGICAL INFORMATION

Acute toxicity data (formulated product):

LD50/oral/rat = 1782 mg/kg, slightly toxic.

LD50/dermal/rat = > 5 000 mg/kg, practically non-toxic.

LC50 (4hours)/rats = > 6.51mg/L, non-toxic.

Sensitisation: positive

Severe irritant to rabbit eyes.

Severe irritating to rabbit skin.

Ecological information: (technical)

Toxicity for non-target organisms

Avian toxicity:

LD₅₀ (96 h) for bobwhite quail 1536 mg/kg, slightly toxic.

<p>LC₅₀ (5 days) for mallard duck >5620 mg/kg, practically non-toxic.</p> <p>Aquatic toxicity:</p> <p>LC₅₀ (96 h) for rainbow trout 3.7 mg/l, moderately toxic.</p> <p>LC₅₀ (96 h) for bluegill sunfish 6.2 mg/l, moderately toxic.</p> <p>LC₅₀ (48 h) for water flea 22 mg/l, slightly toxic.</p> <p>EC₅₀ (120 h) for blue-green algae >19 mg/l, practically non-toxic.</p> <p>EC₅₀ (96 h) for green algae 2.9 µg/l, very highly toxic.</p> <p>EC₅₀ (14 days) for duckweed 2.9 µg/l, very highly toxic</p> <p>EC₅₀ (120 h) for diatom 0.21 mg/l, highly toxic</p> <p>Arthropod toxicity:</p> <p>LD50 (contact, 48 h) for honeybee >100 µg/bee, practically non-toxic.</p> <p>LD50 (oral, 48 h) for honeybee >94 µg/bee,</p> <p>Soil organism toxicity, invertebrates:</p> <p>LC₅₀ (acute toxicity, 14 d) for earthworm 387 mg/kg dry soil, slightly toxic.</p> <p>Environmental fate:</p> <p>Animals: Rapidly oxidised by rat liver microsomal oxygenases to 2, 6-diethylaniline.</p> <p>Plants: Rapidly metabolised in plants to 2-chlor-2', 6'-diethylacetanilide, with further degradation to the aniline derivative.</p> <p>Soil/Environment: Rapidly degraded in soil by microbial action to 2-chloro-2',6'-diethylacetanilide, with further degradation to the aniline derivative.</p> <p>Hydrolysis: 0% within 30days (25^o C, pH 6), Photochemical degradation, soil: half life: 144.4 days. Dissipation: soil, aerobic: half life: 8-17days. Water: 15days, soil: Koc131-192.</p>

TRANSPORT INFORMATION	
IMO hazardous description:	UN:1993
Class:	III
Packing group:	III
Hazard labels:	Xn, Xi
Proper shipping name:	Environmentally hazardous substance, combustible liquid, N.O.S.
	Take with care. Keep locked up. Keep away from fire.

REGULATORY INFORMATION	
Contains:	38.4% Alachlor EC
Symbol(s):	Xn – Sensitising Xi – Irritant
R-phrases(s):	R22 –Harmful if swallowed. R40 – Possible risk of irreversible effects. R 43 –May cause sensitisation by skin contact.
S-phrase(s):	S2 – Keep out of reach of children. S13 – Keep away from food, drink and animal feeding stuffs.

- All information provided above is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors or omissions or the consequence thereof.