# Alachlor EC

Safety Data Sheet

according to the GHS Classification and labelling of chemicals – SANS 10234 and the Regulations for Hazardous agents 2021.

Issue date: 04/10/2024 Date of revision: 31/10/2027 Version. 2.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Name | : | Alachlor EC |
| Trade name | : | Alachlor EC |
| Product code | : | UPL_L6667 |

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

| | | |
|---|---|---|
| Main use category | : | Herbicide. |
| Professional use spec | : | Restricted Use- For Professional Use Only. |
| Use of the substance/mixture | : | A pre-emergence emulsifiable concentrate herbicide for the control of most annual grasses and certain broadleaf weeds in maize, sweetcorn, groundnuts, soybeans, sunflower, transplanted cabbage, broccoli, Brussels sprouts, potatoes, sugarcane and pineapples. |

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

UPL South Africa (Pty) Ltd.
Sunbury Office Park (off Douglas Saunders Drive) 7
La Lucia Ridge
P.O. Box 1726, Mount Edgecombe, 4300
4019 Durban - South Africa
T +27 31 514 5600
www.upl-ltd.com/za

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | Griffon Poison Information Centre: 082 446 8946,<br>Poisons Information Helpline: 0861 555 777,<br>In case of Spillage: Spill Tech: 086 100 0366 / 083 253 6618 |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to UN GHS Purple Book (Rev. 9, 2021)

| | |
|---|---|
| Flammable liquid, Category 3 | H226 |
| Acute toxicity (Oral), Category 4 | H302 |
| Acute toxicity (inhalation:dust,mist) Category 4 | H332 |
| Skin sensitization, Category 1 | H317 |
| Specific target organ toxicity – Single exposure, Category 3 | H335+H336 |
| Aspiration Hazard, Category 1 | H304 |
| Carcinogenicity, Category 2 | H351 |
| Hazardous to the aquatic environment — Acute Hazard, Category 1 | H400 |
| Hazardous to the aquatic environment — Chronic Hazard, Category 2 | H411 |

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to UN GHS Purple Book (Rev.9,2021)

Hazard pictograms :

GHS02 GHS07 GHS08 GHS09

Signal word : Danger

Contains : Alachlor; solvent naphtha

Hazard statements

H226 - Flammable liquid and vapour.
H302 – Harmful if swallowed
H332 – Harmful if inhaled.
H317 – May cause allergic skin reaction.
H335 + H336 – May cause respiratory irritation or drowsiness or dizziness.
H304 – May be fatal if swallowed and enters airways.
H351 – Suspected of causing cancer.
H400 - Very toxic to aquatic life.
H410 – Very toxic to aquatic life with long lasting effects.

Precautionary statements :

P101 – If medical advise is needed, have product container or label at hand.
P102 – Keep out of reach of children
P103 – Read carefully and follow all instructions.
P203 – Obtain, read and follow all safety instructions before use.
P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 – Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242+P243 – Use non-sparking tool. Take action to prevent static discharges.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 – Contaminated work clothing shoulld not be allowed out of the work place.
P273+P391 - Avoid release to the environment if this is not the intended use and collect spillage.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P316 - IF SWALLOWED: Get medical help immediately.
P302+P352 – IF ON SKIN: Wash with plenty of water.
P303+P361+P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P318 – IF exposed or concerned, get medical advice.
P319 – Get medical help if you feel unwell.
P321 - Specific treatment (see first aid treatment on this label).
P330 – Rinse mouth.
P331 – Do NOT induce vomiting.
P333+P317 – If skin irritation or rash occurs: Get medical help.
P362+P364 – Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 – Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to UN GHS Purple Book (Rev.9, 2021) |
|---|---|---|---|
| Alachlor | (CAS-No.) 15972--60-8<br>(EC-No.) 240-110-8 | 25 – 50 | Acute Tox. 4 (Oral), H302 (ATE=930 mg/kg bodyweight)<br>Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1.04 mg/l/4h).<br>Skin sens. 1, H317<br>Carc. 2, H351.<br>Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 1, H410 (M=10) |
| Solvent naphtha (petroleum), heavy aromatic | CAS-No.) 64742-94-5<br>(EC-No.) 265-198-5 | 45 - 60 | Flammable Liq. 4, H227<br>STOT-SE 3, H335, H336<br>Aspiration Hazard 1, H304<br>Carc. 2, H351<br>Aquatic Chronic 2, H411 |
| A blend of benzenesulfonic acid, 4-C10-13-sec-alkyl devs., calcium salts and isobutyl alcohol. | (CAS-No.) 84989-14-0<br>(CAS-No.) 78-83-1 | 0.81 – 1.08 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H336<br>STOT SE 3, H335 |

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation:**

Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Avoid mouth to mouth resuscitation. Keep person warm and at rest. Treat symptomatically and supportively as and when required. **Seek medical advice immediately.**

**Skin contact:**

Remove contaminated clothing, shoes and leather goods immediately. Gently wipe of excess chemical. Wash skin gently and thoroughly with non-abrasive soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15 to 20 minutes). Seek medical advice if necessary.

**Eye contact:**

Flush eyes immediately with large amounts of gently flowing cold water or normal saline solution, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15 to 20 minutes). If irritation persists, get medical attention.

**Ingestion:**

Have victim rinse mouth thoroughly with water. **Do not induce vomiting. Seek medical advice immediately.** If the person is alert and respiration is not depressed, give large quantity of water to drink. Never give anything by mouth to an unconscious person. Establish and maintain airway. Treat respiratory difficulty with artificial respiration and oxygen. Administration of gastric lavage or oxygen should be performed by qualified medical personnel.

**Advice to physician:**

No specific antidote. Treat symptomatically and supportively.

## SECTION 5: Firefighting measures

**Fire/Explosion hazard:**

**High explosive risk.**

**Extinguishing agents:**

Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

**Fire-fighting:**

Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire.
Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind.
Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal.
Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways.
Do not use high volume water jet, due to contamination risk. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

**Personal protective equipment:**

Fire may produce irritating or poisonous vapours or gases (oxides of chlorine and sulphur) or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

## SECTION 6: Accidental release measures

**Personal precautions:**

Avoid contact with skin and eyes. Do not breathe in fumes. For personal protection see Section 8.

**Environmental precautions:**

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

**Occupational spill:**

Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.
**For spills:** Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind.
To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Label drums with its content and dispose it in accordance with local regulations.
Open burning or dumping of this material is prohibited.
Do not get water inside containers.

## SECTION 7: Handling and storage

**Handling:**

Harmful by inhalation or if swallowed. Avoid inhalation and contact with eyes and skin. Use with adequate ventilation. Do not handle broken packages without protective equipment. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Seek medical advice.
Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.
Worker should shower at the end of each work day. Launder all clothing before it is re-used again.

**Storage:**

Store in its original container in dry, cool, well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs and water supplies.

Keep out of reach of children, uninformed persons and animals. Do not contaminate other pesticides and fertilizers.

**Storage stability:**

Stable for a period of 2 years under normal warehouse conditions.

## SECTION 8: Exposure controls/personal protection

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

**PERSONAL PROTECTIVE EQUIPMENT:**

**Respirator:**

An approved respirator suitable for protection from spray or mists of pesticides is required. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

**Clothing:**

Employee must wear appropriate protective (impervious) clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

**Gloves:**

Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

**Eye protection:**

The use of chemical resistant goggles or face shield.

**Emergency eye wash:** 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.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid, Emulsifiable concentrate |
| Colour | : | Light violet. |
| Appearance | : | clear. liquid: |
| Odour | : | Aromatic |
| Odour threshold | : | Not available |
| Melting point | : | Not available |
| Freezing point | : | Not available |
| Boiling point | : | Not available |
| Flammability | : | Flammable |
| Explosive limits | : | Not available |
| Lower explosive limit (LEL) | : | Not available |
| Upper explosive limit (UEL) | : | Not available |
| Flash point | : | 30°C |
| Auto-ignition temperature | : | Not available |
| Decomposition temperature | : | Not available |
| pH | : | 5.5 – 7.0 |
| Viscosity, kinematic | : | Not available |
| Solubility | : | Not available |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |
| Vapour pressure at 50 °C | : | Not available |
| Density | : | Not available |
| Relative density | : | Not available |
| Relative vapour density at 20 °C | : | Not available |
| Particle size | : | Not applicable |
| Particle size distribution | : | Not applicable |
| Particle shape | : | Not applicable |
| Particle aspect ratio | : | Not applicable |
| Particle aggregation state | : | Not applicable |
| Particle agglomeration state | : | Not applicable |
| Particle specific surface area | : | Not applicable |

Particle dustiness : Not applicable
Corrosiveness : Corrosive

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

**Stability:**

Considered stable for a period of 2 years under recommended warehouse and light conditions.

Hazardous decomposition:

Emits toxic and irritant vapours under fire conditions.

**Incompatibility:**

Hydroysed by strong acids and bases. May corrode plastic, steel and black iron.

**Thermal decomposition:**

Thermal decomposition products may include toxic oxides of nitrogen and carbon and toxic corrosive fumes of chloride.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined by UN GHS classification (Purple Book, Rev. 9, 2021)

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

| Alachlor EC | |
|---|---|
| ATE calculated (oral) | 2338.24 mg/kg |
| ATE calculated (Inhalation -dust,mist) | 1.5 mg/l/4h |

| Alachlor (15972--60-8) | |
|---|---|
| LD50 oral rat | 930 (≤ 1350) mg/kg |
| LD50 dermal rabbit | 13300 mg/kg |
| LC50 Inhalation - Rat | 1.04 mg/l/4h |

Skin corrosion/irritation : Not classified
pH: 5.5 – 7
Serious eye damage/irritation : Causes serious eye damage.
pH: 5.5 – 7
Respiratory or skin sensitisation : May cause allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation or drowsiness or dizziness.

STOT-repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

Not rapidly degradable

| Alachlor (15972--60-8) | |
|---|---|
| LC50 - Fish [1] | 5.3 mg/l |
| LC50 fish | 5.8 mg/l |
| LC50 - Other aquatic organisms [1] | > 320 mg/l |
| EC50 Daphnia | 13 mg/l |
| ErC50 algae | 0.012 mg/l/72h |

| Alachlor EC | |
|---|---|
| LC50 - Fish (calculated) | 16.58 mg/l |
| EC50 Daphnia (calculated) | 40.65 mg/l |
| EC50 algae (calculated) | 0.037 mg/l |

### 12.2. Persistence and degradability

**Degradability:**

Rapidly degraded in soil and water by microbial action to 2-chloro-2',6'-diethylacetanilide, with further degradation to the aniline derivative. Alachlor persists in soil for 6 – 10 weeks, depending on soil type and climate.

**Mobility:**

Alachlor is moderately to highly mobile in soil. Mobilisation decreases with an increase in organic carbon and clay content in soil.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Pesticide and container disposal:**

Open dumping or burning of this pesticide is prohibited. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Emptied containers retain vapour and product residues. TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three (3) times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages. Do not re-use the empty container for any other purpose. Prevent contamination of food, feedstuffs, drinking water and eating utensils.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

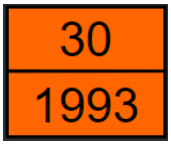
| ADR | IMDG | IATA |
|---|---|---|
| **14.1. UN number or ID number** | | |
| UN 1993 | UN 1993 | UN 1993 |
| **14.2. UN proper shipping name** | | |
| FLAMMABLE LIQUID, N.O.S. | FLAMMABLE LIQUID, N.O.S. | FLAMMABLE LIQUID, N.O.S. |
| **Transport document description** | | |
| UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III, (E), ENVIRONMENTALLY HAZARDOUS | UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS | UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| **14.3. Transport hazard class(es)** | | |
| 3 | 3 | 3 |
|  |  |  |
| **14.4. Packing group** | | |
| III | III | III |
| **14.5. Environmental hazards** | | |
| Dangerous for the environment : Yes | Dangerous for the environment : Yes<br>Marine pollutant : Yes | Dangerous for the environment : Yes |
| No supplementary information available | | |

### 14.6. Special precautions for user

**Overland transport**

Hazard identification number : 30

Orange plates :




### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulatory Information:

**Relevant regulatory information regarding authorization, Safety Data Sheets, Occupational Exposure Limits, Hazardous Substances, Dangerous Goods Transport and Waste South Africa:** Occupational Health and Safety Act 1993. Regulations for Hazardous Chemical Agents - 2021. Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). **Hazardous Substances Act**, 1973 (Act No.15 of 1973). Regulations for Hazardous Chemical Agents – 2021. SANS11014:2010. Safety Data Sheet for Chemical Products – Content and Order of Sections. SANS10206: 2020. The Handling, Storage and Disposal of Pesticides. National Road Traffic Act, 1996 (Act No. 93 of 1996). SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes. National Environmental Management: waste Act 59 of 2008.

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

| **Full text of H- statements:** | |
|---|---|
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Asp. Haz. 1 | Aspiration hazard – Category 1 |
| Carc. 2 | Carcinogenicity, Category 2 |
| Flamm. Liq. 3 | Flammable liquids, Category 3 |
| Skin Sens. 1 | Skin sensitization, Category 1 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H317 | May cause allergic skin reaction |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

| **Classification and procedure used to derive the classification for mixtures according to UN GHS Purple Book (Rev. 9, 2021)** | | |
|---|---|---|
| Acute Tox. 4 (Oral) | H302 | Calculation method |
| Acute Tox. 4 (Inhalation: Dust, Mist) | H332 | Calculation method |
| Aquatic Acute 1 | H400 | Calculation method |
| Aquatic Chronic 1 | H410 | Calculation method |
| Aspiration hazard | H304 | Calculation method |
| Carcinogenicity 2 | H351 | Calculation method (from available data) |
| Flammable liquid 3 | H226 | Calculation method (from physchem, List ll ) |
| Skin Sensitization 1 | H317 | Calculation method |
| STOT-SE 3 | H335+H336 | Calculation method |

Safety Data Sources : Pesticide Manual, ECHA, Supplier SDS's

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.