SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

Product identifier:

Identification as on the label/Trade name: AcetoSafe

Common name: Acetochlor 700 g/L EC

Relevant identification uses of the substance and uses advised against:

Identified uses: Herbicide

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

Enviro Bio-Chem (Pty) Ltd, 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Details of the Registration Holder:

Erintrade cc t/a RT Chemicals, 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Contact Details:

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

Emergency telephone numbers:

24 Hour Emergency Number: Bateleur: +27 83 123 3911
Griffon Poison Information Centre: +27 82 446 8946
Poisons Information Helpline: 0861 555 777
Tygerberg Hospital: +27 21 931 6129

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories	Hazard statement
Flammable Liquid (Category 3)	H226
Acute toxicity oral (Category 3)	H301
Skin irritation (Category 2)	H315
Skin sensitization (Category 1)	H317
Eye damage (Category 1)	H318
Acute toxicity inhalation (Category 4)	H332
STOT SE (Category 3)	H335
Carcinogen (category 2)	H351
Reproductive Toxicity (Category 2)	H361f
STOT RE (Category 2)	H373
Aquatic Toxicity Acute (Category 1)	H400
Aquatic Toxicity Chronic (Category 1)	H410

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: Flammable liquid and vapour.

The most important adverse human health effects: Toxic if swallowed. Harmful if inhaled. Suspected carcinogen. Suspected of damaging fertility. Causes serious eye damage, skin irritation and may cause an allergic skin reaction.

Label elements

Hazard pictograms

Signal Word: Danger

Hazard Statements:

H226	Flammable liquid and vapour
H301	Toxic if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H361f	Suspected of damaging fertility
H373	May cause damage to kidneys through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P102	Keep out of reach of children
P103	Read label before use
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.
P233	Keep container tightly closed
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fumes/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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing.
P391	Collect spillage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up
P501	Dispose of contents/container in accordance with local/regional/ national regulations

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC)	CAS Number.	Concentration % by weight	Classification EC1272/2008
Acetochlor	34256-82-1	72 %	Skin Irritation (Category 2) H315 Skin Sensitization (Category 1) H317 Acute Toxicity -Inhalation (Category 49) H332 STOT SE (Category 3) H335 Carcinogenicity (Category 2) H351 STOT RE (Category 2) H373 (kidney) Aquatic Acute (Category 1) H400 Aquatic Chronic (Category 1) H410 Reproductive Toxicity (Category 2) H361f
Calcium dodecylbenzene sulfonate	26264-06-2	<20%	Skin Irritation (Category 2) H315 Eye damage (Category 1) H318 Aquatic Chronic (Category 4) H413 Acute Toxicity Oral (Category 4) H302
Dichlormid (safener)	37764-25-3	<10%	Skin Irritation (Category 2) H315
Dimethylbenzene	1330-20-7	<10%	Flammable liquids (Category 3) H226 Acute toxicity, Inhalation (Category 4) H332 Acute toxicity, Dermal (Category 4) H312 Skin irritation (Category 2) H315

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if you feel unwell.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Seek medical attention immediately.

In case of 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 immediately.

In case of ingestion: Immediately transfer patient to nearest hospital or medical centre, warning by telephone of the estimated arrival time so that the start of treatment is not delayed. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar,tie, belt, or waistband.

Most important symptoms and effects, both acute and delayed:

Inhalation: Hazardous in case of inhalation product is a lung irritant. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Over-exposure by inhalation may cause respiratory irritation.
Ingestions: May be toxic if swallowed.

Skin contact: Irritant, may cause an allergic reaction.

Eye contact: Hazardous in case of eye contact (corrosive).

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Foam. Dry powder. Carbon dioxide. Water spray.

Small Fire: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

Large Fire: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.
Unsuitable extinguishing media**:** Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

Fire Hazard: Flammable
Hazardous decomposition products in case of fire: Refer to Section 10: Stability and Reactivity.

Advice for fire-fighters:

Avoid inhaling hazardous vapours. Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent.
Contain fire control agents for later disposal according to Section 13.
Water can be used to cool unaffected containers.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel: Keep all personal away may be toxic by inhalation. Avoid contact with eyes and skin.
For emergency responders: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent Avoid contact with eyes and skin. Do not breathe in fumes. Refer to section 8 for recommended personal protective equipment. Evacuate unnecessary personnel.

Environmental precautions:

Stop leak if without risk. Do not touch spilled material. Use a light water spray to reduce vapours.
Prevent entry into drains, watercourses, or confined areas; dike if needed.
If the product contaminates public water, inform appropriate authorities immediately in accordance with local regulations.
Dispose in a safe manner in accordance with local/national regulations.

Methods for containment and cleaning up:

For small spills Contain spilled material if possible. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite, or diatomaceous earth
For large spills Prevent entry into drains, watercourses, or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

See section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See section 13 for information on disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Store product in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): No information available.

Biological exposure indices (BEI): No information available.

Additional exposure limits under the conditions of use: No information available.

Exposure control:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Appropriate engineering controls: Provide exhaust ventilation or other engineering controls. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort wear chemical goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Appropriate impervious clothing is required to prevent skin contact with the product.

Respiratory protection: Respiratory protection is required; use an approved air-purifying respirator.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Colour	Pale Pink
Odour	No data available
Odour threshold	No data available
pH	6.7
Melting point / freezing point (° C)	No data available
Boiling point (° C)	No data available
Flash point (° C)	58 ˚C
Evaporation rate	No data available
Flammability	Combustible Liquid
Upper /lower flammability limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density (25°C)	No data available
Water solubility (g/l) at 20°C	No data available
Partition coefficient : n-octanol/water	No data available
Auto-ignition temperature (° C)	No data available
Decomposition temperature (° C)	No data available
Viscosity, dynamic (mPa s)	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

SECTION 10. STABILTY AND REACTIVITY

Reactivity:
The product is stable under normal conditions.

Chemical stability:
Stable under normal storage conditions for 2 years. Avoid excessive heat sources.

Possibility of hazardous reactions:
No information available.

Conditions to avoid:
Avoid excessive heat sources.

Incompatible materials:
Should not be applied in combination with strong acidic and strong alkaline products.

Hazardous decomposition products:
Toxic materials are formed during exposure to high temperatures, (may include but not limited to carbon monoxide and carbon dioxide).

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution: No data available

Information on toxicological effects:

Assessment of acute toxicity:

The product has not been tested. The data reported is for the main ingredients in the mixture.

Acetochlor CAS No. 34256-82-1	
Acute toxicity:	
Acute Oral LD50 (rat - male)	146 mg/kg
Acute Dermal LD50 (rat):	> 2000 mg/kg
Acute Inhalation LC50 - 4 h (rat)	1.15 mg/l
Skin irritation/ corrosion	No data available
Eye damage / irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	No data available
Aspiration hazard	No data available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Calcium dodecylbenzenesulphonate CAS No. 26264-06-2	
Acute toxicity:	
Acute Oral LD50 (rat - male)	1300 mg/kg
Acute Dermal LD50 (rat):	2000 mg/kg
Acute Inhalation LC50 - 4 h (rat)	310 mg/m^3 air
Skin irritation/ corrosion	Adverse effect observed (irritating)
Eye damage / irritation	Adverse effect observed (irritating)
Respiratory or skin sensitization	No adverse effect observed (not irritating)
Germ cell mutagenicity	No data available
Carcinogenicity	No adverse effect observed
Reproductive toxicity	No adverse effect observed (negative)
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	No data available
Aspiration hazard	No data available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Dichlormid CAS No. 37764-25-3	
Acute toxicity:	
Acute Oral LD50 (rat - male)	2816 mg/kg
Acute Dermal LD50 (rabbit)	>5000 mg/kg
Acute Inhalation LC50 - 1 h (rat)	>5.5 mg/l
Skin irritation/ corrosion (rabbit)	Mild skin irritant
Eye damage / irritation (rabbit)	Not a irritant
Respiratory or skin sensitization Local lymph node assay	Negative
Germ cell mutagenicity	No data available

Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	No data available
Aspiration hazard	May be fatal if swallowed and enters airways.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Dimethylbenzene CAS No. 1330-20-7	
Acute toxicity:	
Acute Oral LD50 (rat - male) (Xylene)	3.523 mg/kg
Acute Dermal LD50 (rabbit): (Xylene)	>1.700 mg/kg
Acute Inhalation LC50 - 4 h (rat) (Xylene)	29.09 mg/l
Skin irritation/ corrosion (rabbit)	Moderate skin irritation - 24 h
Eye damage / irritation (rabbit) (Xylene)	Causes serious eye irritation. - 24 h
Respiratory or skin sensitization Local lymph node assay (LLNA)	Negative
Germ cell mutagenicity Test Type Test system Metabolic activation Method Result	 Ames test Salmonella typhimurium With and without metabolic activation OECD Test Guideline 471 Negative
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	No data available
Aspiration hazard	May be fatal if swallowed and enters airways.

Additional information:

Systemic effects (Xylene): Headache, Nausea, Dizziness, Agitation, spasms, narcosis, anemia, inebriation. Prolonged or repeated exposure to skin causes defatting and dermatitis.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. ECOLOGICAL INFORMATION

Acetochlor CAS No. 34256-82-1	
Toxicity	
Birds Acute oral LD_{50}	 928 mg/kg Bobwhite quail; >5620 mg/kg Mallard Duck
Aquatic Toxicity Fish LC_{50} (96 hr) Aquatic Toxicity Daphnia EC_{50} (48 hr) Toxicity to algae – static test ErC_{50} (96h) Toxicity to bees LD_{50} (48 h) for contact	Rainbow trout 0.36 mg/ ℓ, Bluegill sunfish 1.3 mg/ ℓ, Sheepshead minnow 2.4 mg/ ℓ. 8.6 mg/l 0.52 µg/l for green algae (*Selenastrum capricornutum*) >200 µg/bee
Persistence and degradability	Adsorbed by soil with little leaching. The main method of degradation is microbial breakdown.
Bioaccumulation potential	No data available

Mobility in soil	Adsorbed by soil, with little leaching. Microbial degradation accounts for most loss from soil; DT_{50} 8–18 d.
Result of PBT and vPvB assessment	No data available
Other adverse effects	No data available

Calcium dodecylbenzenesulphonate CAS No. 26264-06-2	
Toxicity	
Aquatic Toxicity Fish LC_{50} (96 hr) Aquatic Toxicity Daphnia semi static EC_{50} (96 hr) Toxicity to algae – static test EC50 (96h) Toxicity to bacteria EC50 (3h)	1.74 -7.16 mg/l No data available 2.73 – 29 mg/l 500 – 723 mg/l
Persistence and degradability	No data available
Bioaccumulation potential	No data available
Mobility in Soil	No data available
Result of PBT and vPvB assessment	No data available
Other adverse effects	No data available

Dichlormid CAS No. 37764-25-3	
Toxicity	
Aquatic Toxicity Fish static test LC_{50} (96 h) Aquatic Toxicity Daphnia LC_{50} (48 h) Toxicity to algae –ErC50 (72h) Toxicity to bacteria–EC50 activated sludge (3 hr.)	0.36 mg/l Oncorhynchus mykiss (rainbow trout) 141 mg/l No data available No data available
Persistence and degradability	No data available
Bioaccumulation potential	No data available
Mobility in Soil	No data available
Result of PBT and vPvB assessment	No data available

Dimethylbenzene CAS No. 1330-20-7	
Toxicity	
Aquatic Toxicity Fish static test LC_{50} (96 h) (Xylene) Toxicity to algae – static test EC50 (73 h) (Xylene) Toxicity to bacteria– static test EC50 activated sludge (3 hr.)	2.60 mg/l Oncorhynchus mykiss (rainbow trout) 4.36 mg/l Pseudokirchneriella subcapitata No data available
Persistence and degradability	
Biodegradability	No data available
Bioaccumulation potential	No data available
Mobility in Soil	No data available
Result of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher
Other adverse effects	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product:

Keep out of drains, sewers, ditches, and waterways. Refer to container label for disposal information. Treat as hazardous waste and dispose of in accordance with local/ regional/ national/ international regulations.

Container:

Refer to container label for disposal information. Triple or pressure rinse empty containers. Pour rinse water into spray tank. Dispose of as hazardous waste. Do not contaminate water when disposing of rinse water. Dispose of using an approved waste disposal service provider. Follow all local/ regional/ national/ international regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number	1993
UN proper shipping name	Flammable Liquid, N.O.S., (ACETOCHLOR 700 g/l)
Transport hazard class	3
Packaging group	III
Marine pollutant	Yes

SECTION 15. REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021.UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 8, 2019.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations:

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.

Act 36 of 1947 of the Republic of South Africa. This product is registered under 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

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

Classification according to SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

GHS aligned – all sections

Relevant H statements (number and full text):

STOT RE 2- Specific Target Organ Toxicity repeated exposure - Kidneys (Category 2)

STOT SE-3 Specific Target Organ Toxicity single exposure- respiration (Category 3)

Aquatic acute toxicity (Category 1): Very toxic to aquatic life

Aquatic chronic toxicity (Category 1): Very toxic to aquatic life with long lasting effects

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended

for this product. 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.