Safety Data Sheet (SDS) META 960

According to UN GHS 8th Ed
Revision Date: 30/07/2022

First print date: 01/06/2018
Version: 1.1

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

Product identifier:

Identification as on the label/Trade name: META 960

Common name: Metolachlor 960 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 Regulation (EC) No 1272/2008 EU-GHS/CLP

Hazard classes/Hazard categories	Hazard statement
Skin irritation (Category 2)	H315
Skin Sensitization (Category 1)	H317
Eye damage (Category 1)	H318
Acute toxicity inhalation (Category 4)	H332
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: None known

The most important adverse human health effects: Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure. May cause skin irritation. May cause an allergic skin reaction

Label elements

Hazard pictograms:
Signal Word: Danger

Hazard Statements:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H373	May cause damage to organs 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
P261	Avoid breathing mists, vapours or 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 impervious rubber gloves and boots, protective clothing and chemical safety goggles.
P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P405	Store locked up
P391	Collect spillage
P501	Dispose of contents/container in accordance with local/regional/ national regulations

Other hazards: None known

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC)	CAS Number.	Concentration % by weight	Classification EC1272/2008
Metolachlor	51218-45-2	89%	Skin sensitisation (Category 1) H317 Aquatic Acute (Category 1)H400 Aquatic Chronic (Category 1) H410
Calcium dodecylbenzenesulfonate	26264-06-2	<10%	Acute Toxicity Oral (Category 4) H302 Skin Irritation (Category 2) H315 Eye damage (Category 1) H318 Aquatic Chronic (Category 4) H413

Xylene	1330-20-7	<3%	Flammable liquids (Category 3), H226 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 STOT SE (Category 3), Respiratory system, H335 STOT SE (Category 3) CNS, H336 STOT RE (Category 2), H373 Aspiration hazard (Category 1), H304 Aquatic chronic (Category 3), H412

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 from contaminated area to fresh air and assist breathing as required. Seek medical attention if irritation occurs or if patient feels unwell after inhalation.

In case of skin contact: In case of contact, Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

In case of eye contact: Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention immediately.

In case of ingestion: Wash out mouth with water if the patient is alert and conscious. Do NOT induce vomiting . If vomiting occurs spontaneously, keep head below hips to avoid aspiration. Keep patient at rest and transport to nearest medical facility for further treatment. attention. 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:

Anticipated acute effects:

Inhalation: Harmful if inhaled

Ingestions: May be harmful if swallowed.

Skin contact: Irritant, may cause an allergic skin reaction.

Eye contact: Causes serious eye damage

Anticipated delayed effects: May cause damage to organs through prolonged or repeated exposure

Most important symptoms/effects: None known

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically and supportively

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. Use as little water as possible.

Unsuitable extinguishing media**:** Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

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:

Personal precautions: Avoid contact with skin and eyes. Do not breathe in spray mist / fumes / vapours.
Ventilate area of spill or leak, especially in contained areas.
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.
Emergency procedure: Alert emergency response personnel. Evacuate unprotected spectators and animals.

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. This product is classified as very toxic to aquatic organisms and will cause long-term adverse effects in the aquatic environment.
If the product contaminates public water, inform appropriate authorities immediately in accordance with local regulations.

Methods for containment and cleaning up:

For small spills Contain spilled material by diking if possible. Absorb with materials such as: sand, earth, vermiculite, or diatomaceous earth.Collect in suitable and properly labelled containers.
For large spills Prevent entry into drains, watercourses, or confined areas. Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spill material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal consideration

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:

May be harmful if swallowed. Avoid contact with eyes and skin. Use with adequate ventilation. 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.
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:

Keep under lock and key and out of reach of unauthorised persons, children, and animals. Store in its original, labelled

container, tightly closed in an isolated, dry, cool, and well- ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid

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: Use outdoors in a well-ventilated area. Provide exhaust ventilation or other engineering controls. Ensure that control systems are properly designed. Comply with occupational safety, environmental, fire and other applicable regulations. Ensure that eyewashstations 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.

Eye/face protection: Avoid contact with eyes. Wear a full-face shield when handling the product or spraying. The use of safety glasses with side shields (or goggles) are recommended if a face shield is not used. This product causes serious eye damage

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: Use only in well ventilated areas. Under normal handling conditions no respiratory protection is required. If handling area is not well-ventilated use a NIOSH approved, air purifying respirator with cartridges / canisters approved for organic vapours.

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	Brown
Odour	Odourless
Odour threshold	No data available
pH	5-9
Melting point / freezing point (°C)	No data available
Boiling point (°C)	100
Flash point (°C)	No data available
Evaporation rate	No data available
Flammability	No data available
Upper /lower flammability limits	No data available
Vapour pressure	1.3-5 mm/20℃

Vapour density	No data available
Relative density (25°C) g/cm^3	No data available
Water solubility (g/l) at 20°C	Slightly soluble
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: None known

Chemical stability: The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

Possibility of hazardous reactions: Unlikely to occur

Conditions to avoid: Extreme heat or exposure to flames

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.

Metolachlor tech CAS No. 51218-45-2	
Acute toxicity:	
Acute Oral LD50 (rat - male)	2200 mg/kg
Acute Dermal LD50 (rat):	>10000 mg/kg
Acute Inhalation LC50 - 4 h (rat)	>1.75 mg/l
Skin irritation/ corrosion (rabbits)	Mild skin irritant
Eye damage / irritation (rabbits)	Mild eye irritant
Respiratory or skin sensitization	Mild skin sensitiser
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	No data available

Additional Information:

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)	0.31 mg/l
Skin irritation/ corrosion	Irritating to skin
Eye damage / irritation	Irritating to eyes
Respiratory or skin sensitization	Not a respiratory or skin sensitizer
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	No data available

Additional Information:

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

Xylene CAS No. 1330-20-7	
Acute toxicity:	
Acute Oral LD50 (rat - male)	3523-4000 mg/kg
Acute Dermal LD50 (rabbit):	12126 mg/kg bw
Acute Inhalation LC50 - 4 h (rat)	6700 mg/l
Skin irritation/ corrosion (rabbits)	Moderate skin irritation - 24 h
Eye damage / irritation (rabbits)	Causes serious eye irritation. - 24 h
Respiratory or skin sensitization Sensitisation: Local lymph node assay (LLNA) - Mouse	Negative
Germ cell mutagenicity: Test Type: Mutagenicity (mammal cell test): chromosome aberration Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: Regulation (EC) No. 440/2008, Annex, B.10 Result: Negative Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative	
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific Target Organ Toxicity STOT single exposure	May cause respiratory irritation. - Respiratory system system.
Specific Target Organ Toxicity STOT repeated exposure	Inhalation - May cause damage to organs through prolonged or repeated exposure. - Central nervous system, Liver, Kidney
Aspiration hazard	May be fatal if swallowed and enters airways.

Additional Information:

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

SECTION 12. ECOLOGICAL INFORMATION

Metolachlor tech CAS No. 51218-45-2	
Toxicity	
Birds Acute oral LD_{50} Dietary LC_{50} (8d)	 >2150mg/kg Mallard ducks and Bobwhite quail >1000 mg/kg Mallard ducks and Bobwhite quail
Aquatic Toxicity Fish LC_{50} (96 hr) Aquatic Toxicity Daphnia LC_{50} (48 hr) Algae EC_{50} (72h) Bee Toxicity LC_{50} (24h) Worms LC_{50} (14d) earthworms	3.9 mg/l (rainbow trout); 4.9 mg/l (Carp) ;10 mg/l (bluegill sunfish) 25 mg/l 0.1 mg/l (*Scenedesmus subspicatus*) > 110 µg/ bee (Oral and contact) 140mg/kg soil
Metabolism	Major aerobic metabolites are derivatives of oxanilic and sulfonic acids
Persistence and degradability	DT50 in soil c. 20 d (field).
Bioaccumulation potential	Not determined
Mobility in soil	Koc 121-309.

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

Xylene CAS No. 1330-20-7	
Toxicity	
Aquatic Toxicity Fish LC_{50} static test (96 hr) Aquatic Toxicity Daphnia semi static EC_{50} (96 hr) Toxicity to algae – static test EC50 (73 hr) Toxicity to bacteria static test IC50 (3h)	2.60 mg/l Oncorhynchus mykiss (rainbow trout) No data available 4.36 mg/l Pseudokirchneriella subcapitata (green algae) No data available
Persistence and degradability	
Biodegradability-aerobic 28 days	94 % - Readily biodegradable.
Bioaccumulation potential	
Bioaccumulation 56 days @ 10 °C	1.3 mg/l (Xylene) - Oncorhynchus mykiss (rainbow trout) - Bioconcentration factor (BCF): 7.4 - 18.5
Mobility in Soil	No data available
Result of PBT and vPvB assessment	No data available
Other adverse effects	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product:

Keep out of drains, sewers, ditches, and waterways. Open dumping or burning of this pesticide is prohibited.
Waste resulting from the use of this product cannot be re-used or reprocessed. 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. Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is cleaned, reconditioned, or destroyed. Rinse empty container three times with a volume of water equal to at least one tenth of that of the container. Pour rinse water into spray tank. Dispose of as hazardous waste. 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	3082
UN proper shipping name	Environmentally Hazardous Substance; Liquid; N.O.S. (Metolachlor 915 g/l)
Transport hazard class	9
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):

H312-Harmful in contact with skin
H226-Flammable liquid and vapour

H304-May be fatal if swallowed and enters airways
H413-May cause long lasting harmful effects to aquatic life
H319-Causes serious eye irritation
H335-May cause respiratory irritation
H336-May cause drowsiness or dizziness
H412-harmful to aquatic life with long lasting effects
Acute toxicity inhalation (Category 4) : Harmful if inhaled
Skin sensitisation (Category 1) : My cause an allergic skin reaction
Skin irritation (Category 2): Causes skin irritation
Eye damage (Category 1): Causes serious eye damage
STOT RE 2- Specific Target Organ Toxicity repeated exposure (Category 2): May cause damage to organs through prolonged or repeated exposure
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.