


Safety Data Sheet

UNIMOC EC- Reg. No: L 7341 (Act No 36 of 1947) Reg. No: N-AR 1553

Date of issue: July 2003
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1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	UNIMOC EC
Other means of identification:	Metolachlor 960 g/L EC
UN Number:	3082, 1993
Recommended use:	Herbicide
Restrictions on use:	Agriculture
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) : 012 664 1100 TYGERBERG: 021 931 6129 RED CROSS: 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	2-chloro- <i>N</i> -(2-ethyl-6- methylphenyl)- <i>N</i> -(2-methoxy-1-methylethyl) acetamide
2) CLASSIFICATION OF THE SUBSTANCE / MIXTURE:	
Classification of the product:	UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU Aquatic Acute Cat: 1 (H400) Aquatic Chronic Cat: 1 (H410) Full text of R-phrases; see section 15
Label elements:	Hazard Symbol(S)  Signal Word: WARNING Hazard Statement (S) H227: Combustible liquid H317: May cause an allergic skin reaction. H410: Very toxic to aquatic life with long lasting effects. Precautionary Statement(S) P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

	P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves. P302+P352: IF ON SKIN: Wash with plenty of water. P362+P364: Take off contaminated clothing and wash it before reuse. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P321: Specific treatment (see on this label). P391: Collect spillage. P501: Dispose of contents/container in accordance with local/regional/national regulations.				
Health effects: eyes:	May cause irritation to eyes.				
Health effects: skin:	May cause irritation to skin. Contact skin sensitizer.				
Health effects: ingestion	Harmful if swallowed				
Health effects: inhalation	Unlikely to cause harmful effects under normal conditions and use				
3) COMPOSITION / INFORMATION ON INGREDIENTS:					
Mixture:					
Chemical name	Composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
Metolachlor	96%	51218-45-2		Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	
4) First Aid Measures:					
Eye contact:	Flush eyes with plenty of clean water for at least 15 minutes holding eyelids open if necessary. Seek medical assistance immediately. Use safety goggles.				
Skin contact:	Strip off all contaminated clothing and thoroughly wash body with large amounts of water and soap. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical assistance should irritation persist. Wash contaminated clothing before re-use.				
Ingestion	Never give anything by mouth to an unconscious person. If swallowed. For advice, contact the National Poisons Centre. Symptoms include diarrhoea, shortness of breath, vomiting and weakness. Seek medical assistance immediately and show this data sheet.				
Inhalation:	Administer medicinal charcoal in large quantities of water. Perform gastric lavage and catharsis if the victim is not unconscious. If less than 10 mg per kg body weight was ingested, administer 30 – 60 g activated charcoal in 150 – 300 ml water.				

<p>Most important symptoms and effects, acute and delayed:</p> <p>Indication of immediate medical attention and special treatment needed:</p> <p>Advice to physician</p>	<p>Remove patient to well ventilated area and loosen clothing around the neck. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation.</p> <p>Not Known</p> <p>Epinephrine, atropine and expectorants are not generally helpful and may complicate treatment.</p> <p>Symptomatic treatment and supportive therapy as indicated.</p>
5) FIRE-FIGHTING MEASURES:	
<p>Suitable extinguishing media:</p> <p>Unsuitable extinguishing media:</p> <p>Special hazards arising from the substance or mixture:</p>	<p>For small fires, use foam, carbon dioxide, dry powder or halon extinguishant. For large fires, use foam or water-fog; avoid the use of a water jet.</p> <p>Generates poisonous and Corrosive fumes.</p>
Fire Fighting:	<p>Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire.</p> <p>Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal.</p> <p>Avoid inhaling hazardous vapours and fumes. Keep upwind. Remove containers if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material and avoid polluting waterways. Avoid the accumulation of polluted run-off from the site.</p> <p>Small fires: If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with spray water.</p>
Protective clothing:	Full protective clothing and self-contained breathing apparatus
6) ACCIDENTAL RELEASE MEASURES:	
<p>Personal precautions:</p> <p>Environmental precautions:</p> <p>Cleaning procedure:</p>	<p>Wear appropriate safety clothing and eye/face protection. Do not breathe in spray or fumes. For personal protection see Section 8.</p> <p>Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.</p> <p>Wear protective clothing. Clear area of unprotected personnel. Contain and absorb liquid spills with inert material and place in waste containers. Wash area with</p>

<p>Disposal:</p>	<p>water containing soda or detergent and absorb with further inert material. If spill does enter waterways contact the local authority. Heavily contaminated soil layers should be removed and disposed of in an approved way. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical</p> <p>Waste Disposal:</p> <p>In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.</p> <p>Container Disposal:</p> <p>Refer to the product label for instructions.</p> <p>If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product.</p> <p>DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.</p> <p>Do not transport if this container is damaged or leaking.</p>
<p>7) HANDLING & STORAGE:</p>	
<p>Handling:</p> <p>Storage:</p>	<p>Wear protective clothing according to operator safety during removal of spillage. Wear eye protection, chemically resistant gloves, boots and coveralls. Hygiene measures: Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.</p> <p>Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds.</p> <p>Keep away from children or uninformed persons.</p>
<p>8) EXPOSURE CONTROL / PERSONAL PROTECTION:</p>	
<p>It is essential to provide adequate ventilation. The measures appropriate for a particular work site 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.</p> <p><u>PERSONAL PROTECTIVE EQUIPMENT:</u></p> <p>Clothing:</p> <p>Gloves:</p> <p>Eye protection:</p> <p>Respiratory protection:</p>	<p>Employee must wear appropriate protective (impervious) clothing and equipment. Wash contaminated clothing before re-use.</p> <p>Employee must wear appropriate chemical-resistant gloves.</p> <p>The use of safety goggles with side shields is recommended.</p> <p>Wear respirator if ventilation is inadequate or exposure to high levels are likely</p>

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.
9) PHYSICAL & CHEMICAL PROPERTIES:	
Form: Colour: Odour: Odour threshold: pH: Melting point / Freezing point Initial boiling point and boiling range Flash point: Evaporation rate: Flammability (solid, gas) Upper/ lower flammability or explosive limits: Vapour pressure: Vapour density: Relative density: Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature: Viscosity:	Liquid, Emulsifiable concentrate Brown opaque liquid Distinct benzene odour No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available
10) STABILITY & REACTIVITY:	
Reactivity: Chemical stability: Hazardous decomposition product(s): Conditions to avoid: Incompatible materials:	Not reactive under normal conditions. Stable under normal use and storage conditions. When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Spray solutions should not be mixed, stored or applied in containers other than plastic, plastic-lined steel, stainless steel or fiberglass. Fire may produce irritating or poisonous vapours, mists or other products of combustion. Contact with incompatible materials. Keep out of reach of children. Excessive heat and freezing temperature None known.
11) TOXICOLOGICAL INFORMATION: BASED ON TECHNICAL ACTIVE INGREDIENT.	
Acute Oral : Acute oral <u>LD</u> ₅₀ for female rats 1063, male rats 1936 mg/kg. Inhalation : <u>LC</u> ₅₀ (4 h) for rats >2.02 mg/l air. Dermal : <u>LD</u> ₅₀ for rats >5050 mg/kg Skin irritation : Mild skin irritant Eye irritation : Mild eye irritant	

Sensitization : May cause sensitization on laboratory animals (guinea pigs).

Other:

12) ECOLOGICAL INFORMATION

Information below based on active ingredient: **Metolachlor**

Bees : LD₅₀ (oral and contact) >110 µg/bee.

Birds : Acute oral LD₅₀ for mallard ducks and bobwhite quail >2150 mg/kg. Dietary LC₅₀ (8 d) for bobwhite quail and mallard ducks >10 000 mg/kg.

Fish : LC₅₀ (96 h) for rainbow trout 3.9, carp 4.9, bluegill sunfish 10 mg/l. Daphnia : LC₅₀ (48 h) 25 mg/l.

Algae : EC₅₀ for *Scenedesmus subspicatus* 0.1 mg/l.

Earth Worms: LC₅₀ (14 d) for earthworms 140 mg/kg soil.

Environmental fate:

Persistence and degradation:

Persistence Rapidly oxidised by rat liver microsomal oxygenases via dechlorination, O-demethylation and side-chain oxidation (*J. Agric. Food Chem.*, 1989, **37**, 1088). **Plants** In plants, metabolism involves natural product conjugation of the chloroacetyl group, and hydrolysis and sugar conjugation at the ether group. Final metabolites are polar, water-soluble, and non-volatile.

Soil/Environment Major aerobic metabolites are derivatives of oxanilic and sulfonic acids. DT₅₀ in soil c. 20 d (field). K_{oc} 121–309.

13) DISPOSAL CONSIDERATIONS:

Waste Disposal : : In accordance with local and national regulations. Spilled product cannot be re-used and must be disposed of by

incineration or disposal in a chemical waste disposal facility. If containers cannot be

recycled, they should be disposed of together with the waste chemical. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal : Refer to the product label for instructions.

If containers cannot be recycled, they should be disposed of together with the waste chemical

DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.

Do not transport if this container is damaged or leaking.

14) TRANSPORTATION INFORMATION:

UN NUMBER: 3082 / 1993

Road Transport ADR/ RID:

Class: 9

Packaging group: III

Labelling no: 9

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, N.O.S. (Metolachlor).

Maritime Transport IMDG / IMO:

Class: 9

Packaging group: III

Labelling no: 9

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, N.O.S. (Metolachlor).

Marine pollutant: Yes

Air Transport ICAO/IATA:

Class: 9

Packing group: III

Labelling no: 9

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, N.O.S. (Metolachlor)

Marine pollutant: Yes

15) REGULATORY INFORMATION:

Symbol(s): Xi, N

Indication of Danger: irritating, Environmentally Hazardous Substance

R-phrases(s):

R 22 Harmful if swallowed.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s):

S 1/2 Keep under lock and Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using do not eat, drink or smoke.

S24 Avoid contact with skin.

S 28 After contact with skin, wash immediately with plenty of water

S35 This material and its container must be disposed of in a safe way.

S36/37 Wear suitable protective clothing and gloves.

S57 Use appropriate container to avoid environmental contamination.

S 61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

16. Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS. The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends

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