



MERIDIAN AGROCHEMICAL COMPANY (PTY) LTD P.O. Box 436, Modderfontein, 1645, SOUTH AFRICA
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REG NO: 2000/010819/07 **VAT NO:** 4120189206

Safety Data Sheet

MENTOR Reg No: L10641 (Act 36 of 1947)

Date of issue: 11/04/2019

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1) IDENTIFICATION OF THE SUBSTANCE OR MIXTUR	E AND OF THE SUPPLIER.	
Product name:	MENTOR	
Other means of identification	S-metolachlor 960 g/L EC	
Recommended use:	Herbicide	
Un number:	3082	
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	
	WESTERN CAPE POISONS TELEPHONE SERVICE (OR POISONS HELPLINE): 0861 555 777	
	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> -[(1 <i>S</i>)-2-methoxy-1-methylethyl]acetamide	
2) Classification of the substance / mixture:		
Classification of the product is based on the co-	Xi, N, Xn, R43, R50/53	
formulants listed in section 3.	Full text of R-phrases: see section 15	
Label elements:	Hazard statement(s):	
	H317 – May cause an allergic skin reaction.	
	H400 – Very toxic to aquatic life.	
	H410 - Very toxic to aquatic life with long lasting effects.	
	Precautionary Statement (s)	
	P102 Keep out of reach of children.	
	P280 Wear protective gloves/ protective clothing/ eye protection/face protection.	
	P302 + P352 IF ON SKIN: Wash with plenty of soap and water.	
	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water forseveral minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
	P312 Call a POISON CENTRE or doctor/ physician if you feel unwell.	



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				D000 147		,
					sh contaminated clothing be	etore reuse.
				ect spillage.		
		P501 Dispose of contents/ container to an approved waste disposal plan				
			Pictogram(s)			
				Signal wo	rd: WARNING	
Health effects: eyes:			May cause mild irritation.			
Health effects: skin:			Mild skin irritant and may cause sensitisation.			
Health effects: ingestion			May cause irritation and may be toxic.			
Health effects: inhalation			May be harmful			
Health effects: Oth	ner					
3) Composition De	etails:			I		
3) COMPOSITION	INFORMATION (ON INGREDIENTS	S:			
Mixture:			ı			
Chemical name	Composition	CAS No.	EC	C No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
	960 g/L 8739	87392-12-9			Skin Sens. 1, H317	
C motolophor			64	8-004-1	Aquatic Acute 1, H400	R43
S-metalochlor S		67392-12-9	5/392-12-9 61	0-004-1	Aquatic Chronic 1, H410	N; R50-53
Full text of R- and S	•	tion 15				
4) First Aid Measu	res:			Design	- tion to food 2. It is	dl '
Inhalation:				rested. If	patient to fresh air. Lie down breathing is shallow or has nd apply resuscitation.	
				ĺ	* * *	

Skin contact:

Immediately flush body with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Do not rub skin. Wash contaminated clothing before re-use.

Seek medical assistance should irritation persist.

Seek medical assistance immediately.

Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses. Seek medical assistance immediately.

Eye contact:



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	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre.
Ingestion:	Seek medical assistance immediately and show this label or container.
	No specific antidote is known. Treat symptomatically and supportively. Keep the patient under constant observation. Perform gastric lavage and catharsis if the patient is not unconscious.
Indication of immediate medical attention and special treatment needed: Advice to physician	Ingestions of <10 mg per kg body weight may be treated by the administration of 30 to 60 g activated charcoal in 150 to 300 ml water.
5) Fire-Fighting Measures:	
Suitable extinguishing media:	Fine water spray, fog, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	Water jet due to contamination/spreading risk
Flash point:	Not explosive > 100 °C
Special hazards arising from the substance or mixture:	Fire will produce dense black smoke. Toxic and irritant vapours will evolve from combustion or thermal decomposition. Exposure to decomposition products may be a hazard to health.
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. 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.
	Generates poisonous and irritating fumes.
	Cool closed containers exposed to fire with water spray.
Protective clothing:	Fire may produce irritating or poisonous vapours, mists or other products of combustion. Avoid breathing fumes.
	Fire-fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.
6) Accidental Release Measures:	
Personal precautions:	Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.
Environmental precautions:	Do not contaminate waterways, drains and groundwater. If

Storage:



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REG NO: 2000/010819/07 **VAT NO:** 4120189206 contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately. Wear protective clothing. Clear area of unprotected Cleaning procedure: personnel. Contain and absorb liquid spills with inert material, remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in waste containers. Wash area with water and detergent and absorb with further inert material. If spill does enter waterways contact the local authority. 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. Used absorbent material and washings should be stored in labelled, sealable containers until these can be disposed of according to local regulations. Open burning or dumping of this material is prohibited. **Waste Disposal:** Disposal: 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. **Container Disposal:** Refer to the product label for instructions. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking. 7) Handling & Storage: Handling: Avoid skin and eye contact and inhalation of spray mist. Keep away from heat and sources of ignition. APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor. TRACKING: Is not required BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants. Hygiene measures: Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Keep away from children or uninformed persons

Keep out of reach of children and animals.



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	Store in original container only in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose containers to temperatures above 40 °C. Keep separate from other products to prevent cross contamination.
8) Exposure Control / Personal Protection:	
Occupational exposure limits:	S-metolachlor: 10 mg/m³ (TWA)
Engineering controls:	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.
PERSONAL PROTECTIVE EQUIPMENT: Clothing:	Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.
	Respiratory protection: Respirator with particulate filter when area is inadequately ventilated.
	Wash contaminated clothing before re-use.
Gloves:	Employee must wear appropriate chemical-resistant gloves composed out of a suitable material i.e. nitrile rubber, to prevent contact with this substance. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure.
Respiratory protection:	Respiratory protection is not required under anticipated circumstances of exposure. A particulate filter respirator may be necessary until effective technical measures are installed. Always follow respirators manufacturer's instructions regarding wearing and maintenance.
Eye protection:	The use of safety goggles with side shields or full face shield is recommended.
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:	Liquid
Colour:	Yellow to brown
Odour:	Characteristic odour
Odour threshold:	No data available
pH:	5



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Melting point/Freezing point (°C)	No data available		
Initial boiling pont and boiling range:	No data available		
Flash point:	> 100 °C		
Evaporation rate:	No data available		
Flammabiity (solid, gas)	No data available		
Upper/lower flammability or explosive limits:	Not explosive		
Vapour pressure:	No data available		
Vapour density:	No data available		
Relative density:	No data available		
Solubility:	Miscible in water		
Partition coefficient: n-octanol/water	No data available		
Auto-ignition temperature:	No data available		
Viscosity:	No data available		
10) Stability & Reactivity:			
Reactivity:	Stable under normal storage conditions.		
Chemical stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.		
Hazardous decomposition product(s):	Can generate poisonous and irritating fumes during combustion or thermal decomposition.		
Conditions to avoid:	Protect from extreme temperatures, direct sunlight, open flames and sources of ignition.		
	Always store in original container.		
Incompatible materials:			

11) Toxicological Information:

Oral : LD50 > 2 500 mg/kg, rat.

Inhalation: LC50 (4h) > 2000 mg/m³, rabbit.

Dermal : LD50 > 2 500 mg/kg, rat.

Skin irritation: Not an irritant. Eye irritation: Not an irritant.

Sensitization: May cause sensitization on laboratory animals.

12) Ecological Information:

Bees: LD₅₀ (Oral) >0.085 mg/bee; Contact >0.2 mg/bee.

Birds: LD₅₀ Bobwhite quail > 2500 mg/kg. Dietary LC50 (8d) Bobwhite quail and Mallard ducklings >5500 ppm.

Fish: LC5₀ (96h) Rainbow trout >1,2 mg/L, Bluegill sunfish >3,0 mg/L. Daphnia: LC50 (48h) 11,2 mg/L.

Algae: LC50 (96h) Shrimps, Mysidopsis bahia > 1.2 mg/l.



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Other aquatic species: E_dC₅₀ (14d) Lemna gibba 0.023 mg/l.

Environmental Fate;

Persistence and Degradability: Final metabolites are water-soluble and non-volatile. Soil half-life, DT₅₀: 11 - 30 days (field).

Degradability: Not readily biodegradable. S-metolachlor is not persistent in water (Degradation half-life: 53 - 147 d).

Mobility in soil: S-metolachlor is not persistent in soil (Degradation half-life: 12 - 46 d).

Mobility in Soil: S-metolachlor has medium mobility in soil.

Bioaccumulative Potential: S-metolachlor does not bioaccumulate

13) Disposal Considerations:

Waste Disposal : 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.

Container Disposal: Refer to the product label for instructions.

Container Refilling and Disposal:

If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product.

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

Road Transport ADR/ RID:

Class: 9

Packaging group: III

Labelling no: 9

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (S-METOLACHLOR)

Maritime Transport IMDG / IMO:

Class: 9

Packaging group: III

Labelling no: 9

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. . (S-METOLACHLOR)

Air Transport ICAO/IATA:

Class: 9

Packing group: III Labelling no: 9

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.. (S-METOLACHLOR)

Considered a marine pollutant.

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15) Regulatory Information:

Signal symbol(s): Xn - Harmful

Xi - Irritant

N - Dangerous for the environment



R-phrase(s):

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-phrase(s):

S 2 - 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.

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.

Hazard statements:

H317 - May cause an allergic skin reaction.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

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.

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