with us you are growing goodness



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REG NO: 2000/010819/07 **VAT NO:** 4120189206

Safety Data Sheet

SIGNET 915 EC - Reg. No: L 9071 (Act No 36 of 1947)

N – AR 1635

Date of issue: 21/01/2013

Date of revision: 28/06/2019

1) IDENTIFICATION OF THE SUBSTANCE OR N Product name:	SIGNET 915 EC
Other means of identification:	
UN number:	S-metolachlor 915 g/L EC
	3082
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 WESTERN CAPE POISONS TELEPHONE SERVICE 0861 555 777 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	Tralkoxydim: 2-[1-(ethoxyimino)propyl]-3-hydroxy-5-(2,4,6-trimethylphenyl) cyclohex-2-enone
2) Classification of the substance / mixture:	
Classification of the product:	Xi N Full text of symbols and R-phrases: see section 15.
Label elements:	Hazard symbols:
	Dangerous for the environment Irritant Signal word: Warning Full text of symbols: see section 15.
Health effects: eyes:	May cause irritation.
Health effects: skin:	May cause irritation.
Health effects: ingestion	May be harmful
Health effects: inhalation	Unlikely to cause harmful effects under normal conditions and use.
	No data available

	ure:

Chemical name	% composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
S-metolachlor	95.3%	87392-12-9	-	Skin Sens. 1: H317: May cause an allergic skin reaction. Aquatic acute 1: H400: Very toxic to aquatic life. Aquatic chronic 1: H410: Very toxic to aquatic life with long- lasting effects.	Xi N R43 R50/53
Benoxacor	4.0%	98730-04-2		-	Xi N R43 R50/53
Solvent naphtha (petroleum), highly aromatic solvent	1-3%	64742-94-5	265-198-5	ASP. Tox. 1: H304: May be fatal if swallowed and enters airways.	

Full text of R- and S-phrases: see section 15.

4) First Aid Measures: Never give anything by mouth to an unconscious person. If Eye contact: swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre. Seek medical assistance immediately. Immediately flush body with large amounts of water. Skin contact: Remove contaminated clothing and footwear. Wash affected areas with soap and water. Do not rub skin. Seek medical assistance should irritation persist. Wash contaminated clothing before re-use Never give anything by mouth to an unconscious person. If Ingestion: swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre. Seek medical assistance immediately. Remove patient to fresh air. Lie down and keep warm and Inhalation: rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately. Most important symptoms and effects, acute and None known delayed: Indication of immediate medical attention and special Treat symptomatically. Ingestion of <10 mg per kg body treatment needed: Advice to physician weight are treated by administering 30 to 60 g activated charcoal in 150 to 300 m/ water. Follow charcoal administration in 4 hrs with sodium sulphate catharsis should diarrhoea not have developed.

5) Fire-Fighting Measures:

Fine water spray, fog, alcohol-resistant foam, carbon Suitable extinguishing media: dioxide.

Unsuitable extinguishing media: Avoid the use of a solid water stream as this may cause spreading.

Special hazards arising from the substance or mixture:	Generates poisonous and irritating fumes.
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.
Protective clothing:	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. Heavily contaminated soil layers should be removed and disposed of in an approved way. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.
Cleaning procedure:	Wear protective clothing. Clear area of unprotected 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.
Disposal:	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.
	Emptied containers retain vapour and product residues, therefore observe all labelled safeguards until the container is destroyed. Combustible containers should be disposed of in pesticide incinerators. Non-combustible containers must first be triple-rinsed with water, then punctured and transported to a scrap metal facility for recycling or 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.
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.
Storage:	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.
8) Exposure Control / Personal Protection:	
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:	
- INCOME THE INCOME	Consult supplier to confirm that the equipment is suitable.
Clothing:	Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance. Wash contaminated clothing before re-use.
Gloves:	Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance.
Eye protection:	The use of safety goggles with side shields is recommended.
Respiratory protection:	Respiratory protection: Respirator with particulate filter when area is inadequately ventilated
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:	Brown
Odour:	Characteristic
Odour threshold:	No data available
pH:	4 - 8 at 1% w/v
Melting point / Freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point:	>70° C
Evaporation rate:	No data available
Flammability (solid, gas)	No data available
Upper/ lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	Approximately 1.118 g/L

Solubility(ies) Emulsifiable in water

Partition coefficient: n-octanol/water

Auto-ignition temperature:

Viscosity:

No data available

No data available

10) Stability & Reactivity:

Reactivity: No data available.

Chemical stability:

When stored appropriately this product should show no significant degradation for 2 years from the data of

significant degradation for 2 years from the date of

manufacture.

Hazardous decomposition product(s):

None known. Hazardous polymerisation does not occur.

Can generate paisance and irritating fumes during

Can generate poisonous and irritating fumes during

combustion or thermal decomposition.

Conditions to avoid:

No data available.

Incompatible materials:

No data available

11) Toxicological Information:

Acute:

Oral LD50 > 2 000 mg/kg, rat.

Dermal LD50 >2 000mg/kg, rat.

Inhalation LC50 (4h): S-metolachlor Technical material: LC50 (4 h) for rats >2910 mg/m³

Benoxacor Technical material: LC_{50} (4 h) for rats >2.0 mg/l air.

Skin irritation : Not an irritant.

Eye irritation : Not an irritant.

Sensitisation : May cause sensitization on laboratory animals

Stability in water:

S-metolachlor: Degradation half-life in water: 53 - 147 days. S-metolachlor is not persistent in water.

Benoxacor: Degradation half-life in water: 2 – 3 days. Benoxacor is not persistent in water.

Stability in soil:

S-metolachlor: Degradation half-life: 12-46 days. S-metolachlor is not persistent in soil. Benoxacor: Degradation half-life: 0.9-5.3 days. Benoxacor is not persistent in soil.

Mobility:

S-metolachlor has medium mobility in soil Benoxacor has medium mobility in soil.

Bioaccumulation:

S-metolachlor: S-metolachlor does not bioaccumulate. Benoxacor: Benoxacor does not bioaccumulate.

12) Ecological Information:

Information below based on active ingredient:

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

Birds: LD50 Bobwhite quail and Mallard ducks > 2400 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.

Algae: LC50 (72h) > 0.14 mg/l.

Worms: No data available.

Other aquatic species: Daphnia magna, LC50 (48h) >10 mg/L. LC50 (96 h) for mysid shrimps (Mysidopsis bahia) 1.4

mg/l.E_dC₅₀ (14d) Lemna gibba 0.023 mg/l. (Based on Smetolachlor tech)

Persistence:

S-metolachlor: does not accumulate, is not persistent in water, not persistent in soil and has medium mobility in soil.

DT₅₀ (field) 11-30 d; DT₉₀ (field) 36-90 d. Median Koc 226 l/kg; Kd 1.3-55.8

Benoxacor: <u>DT₅₀</u> in soil *c.* 5 d. <u>K_{oc}</u> 42–176

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) Environmentally hazardous:

Maritime Transport IMDG / IMO:

Class: 9

Packaging group: III Labelling no: 9

Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (S-metolachlor) Environmentally hazardous:

Air Transport ICAO/IATA:

Class: 9

Packing group: III Labelling no: 9

Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (S-metolachlor) Environmentally hazardous:

15) Regulatory Information:

Symbols: Xi: Irritant

N: Dangerous to the environment

Risk - Phrase:

R43 - May cause sensitization by skin contact.

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

Safety - Phrase:

S2 - 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

H304 - May be fatal if swallowed and enters airways.

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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