

Safety Data Sheet

CLARITY - Reg. No: L 9128 (Act No 36 of 1947)

Date of issue: 09/05/2013

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1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.					
Product name:		CLARITY			
Other means of identification:		Methoxyfenozide 240 g/L SC			
UN number:		Nor classified			
Recommended use:		Insecticide			
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:		3-methoxy-2-methylbenzoic acid 2-(3,5dimethylbenzoyl)-2-(1,1-dimethylethyl)hydrazide			
2) Classification of the substance / mixture:					
Classification of the product:		Not classified as hazardous according to regulatory criteria			
Label elements:		Not classified as hazardous according to regulatory criteria			
Health effects: eyes:		May cause moderate irritation.			
Health effects: skin:		May cause mild irritation and may be harmful.			
Health effects: ingestion		May cause irritation and may be harmful.			
Health effects: inhalation		May cause irritation and may be harmful.			
Health effects: Other		No data available			
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
Methoxyfenozide	24%	161050-58-4	605-245-2	H400 H410 H411	N, Xn R 50/53

Monoethylene glycol	4.0	107-21-1	203-473-3	H302 H315 H373 H336 H340 H360 H412	Not classified
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Full text of R- and S-phrases: see section 15.

4) First Aid Measures:

Eye contact:	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses after initial 1-2 minutes. Seek medical assistance , preferably from an ophthalmologist.
Skin contact:	Remove patient from the source of poisoning and immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with large amounts of water. Seek medical assistance if irritation persists.
Ingestion:	Never give anything by mouth to an unconscious person. Do not induce vomiting. For advice, contact the National Poisons Centre. Have patient sip a glass of water if able to swallow. Seek medical assistance immediately.
Inhalation:	Remove patient from source of poison to fresh. Loosen clothing around neck. Lie down and keep warm at rest. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately if necessary.
Most important symptoms and effects, acute and delayed:	None known
Indication of immediate medical attention and special treatment needed: Advice to physician	No specific antidote known. Treat symptomatically. Prevent aspiration. Administer medicinal charcoal or consider a laxative.

5) Fire-Fighting Measures:

Suitable extinguishing media:	Carbon dioxide, dry chemical powder, water spray, foam or sand. Do not use high volume water jet, due to contamination risk.
Unsuitable extinguishing media:	Avoid the use of a solid water stream as this may cause spreading.
Special hazards arising from the substance or mixture:	May generate poisonous and corrosive fumes such as hydrogen cyanide, carbon monoxide and nitrous gases.
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 from burning materials. Keep upwind. Remove container from fire area 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. Avoid pollution of waterways.
Protective clothing:	Full protective clothing and self-contained breathing apparatus

6) Accidental Release Measures:

Personal precautions:	Avoid contact with spilled product or contaminated surfaces. For personal protection see Section 8.
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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 animals and unprotected personnel. Contain and absorb 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. Heavily contaminated soil layers have to be dug out down to clean soil. If spill does enter waterways contact the local authority. Spilled product should be packed into suitable containers for recovery or disposal. If containers cannot be recycled, they should be disposed of together with the waste chemical. Do not discharge into the drains/surface water/groundwater. If spillage enters drains leading to sewage works, inform the local water company immediately. If the spillage enters rivers or watercourses, inform the local authorities.

Disposal:

Waste Disposal:

In accordance with local and national regulations. May be to waste disposal site or incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Can be land-filled or incinerated in compliance with local regulations. 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 chemicals 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 NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Contaminated packaging should be disposed of as product waste. Empty containers can be land-filled after cleaning in accordance with local and national regulations. Do not transport if this container is damaged or leaking.

7) Handling & Storage:

Handling:

Avoid skin and eye contact and inhalation of spray mist. Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Remove contaminated clothing immediately and clean thoroughly before re-use. Keep working clothes separately. Garments that cannot be cleaned must be destroyed by burning. APPROVED HANDLER: Use only an area provided with appropriate exhaust ventilation. This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor. BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.

Storage:

Store in original container tightly closed and in a locked, dry, cool, well-ventilated area away from foodstuffs, fertilisers and seeds. Keep away from children or uninformed persons. Only use containers approved specifically for the product. Avoid extreme temperatures and direct sunlight.

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.

Component	Exposure limit(s)	Basis
Methoxyfenozide	3.0 mg/m ³ (TWA: Respirable fraction)	Internal Occupational Exposure Standard.
Methoxyfenozide	10.0 mg/m ³ (TWA: Inhalable)	Internal Occupational

	fraction)	Exposure Standard.
<p><u>PERSONAL PROTECTIVE EQUIPMENT:</u></p> <p>Clothing:</p> <p>Gloves:</p> <p>Eye protection:</p> <p>Respiratory protection:</p> <p>Emergency eye wash:</p>	<p>Consult supplier to confirm that the equipment is suitable.</p> <p>Light protective clothing, PVC boots</p> <p>Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance.</p> <p>The use of safety goggles with side shields is recommended.</p> <p>No personal respiratory protective equipment normally needed.</p> <p>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.</p>	
9) Physical & Chemical Properties:		
<p>Form:</p> <p>Colour:</p> <p>Odour:</p> <p>Odour threshold:</p> <p>pH:</p> <p>Melting point / Freezing point</p> <p>Initial boiling point and boiling range</p> <p>Flash point:</p> <p>Evaporation rate:</p> <p>Flammability (solid, gas)</p> <p>Upper/ lower flammability or explosive limits:</p> <p>Vapour pressure:</p> <p>Vapour density:</p> <p>Relative density:</p> <p>Solubility(ies)</p> <p>Partition coefficient: n-octanol/water</p> <p>Auto-ignition temperature:</p> <p>Viscosity:</p>	<p>Liquid</p> <p>Brownish</p> <p>Characteristic</p> <p>No data available</p> <p>6 – 8.5</p> <p>No data available</p> <p>Not flammable</p> <p>Not flammable</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>Approximately 0.973 g/L</p> <p>Suspends in water</p> <p>No data available</p> <p>No data available</p> <p>No data available</p>	
10) Stability & Reactivity:		
<p>Reactivity:</p> <p>Chemical stability:</p> <p>Hazardous decomposition product(s):</p> <p>Conditions to avoid:</p> <p>Incompatible materials:</p>	<p>No data available.</p> <p>When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.</p> <p>No hazardous reactions when stored and handled as recommended. Stable under recommended storage conditions.</p> <p>No data available.</p> <p>No data available</p>	

11) Toxicological Information:

Acute:

Oral LD50 > 5 000 mg/kg, rat

Dermal LD50 > 4 400mg/kg, rabbit

Inhalation LC50 (4h): > 4.0 mg/L , rat

Skin irritation : Slight irritant, rabbit

Eye irritation : Not an irritant, rabbit

Sensitisation : Did not cause sensitization on laboratory animals, guinea pig.

Other : No data available.

Biodegradability : Biodegradation rate may increase in soil and / or water with acclimation.

12) Ecological Information:**Information below based on active ingredient:**

Bees: Non-toxic Oral at >100 µg/bee, Contact >100 µg/bee..

Birds: LD50 Bobwhite quail > 2250 mg/kg. Dietary LC50 (8d) Bobwhite quail & Mallard ducks >5 620 mg/kg diet.

Fish : LC50 (96h) >2.8 sheepshead minnow, fathead minnow > 3.8, bluegill sunfish >4.0 & Rainbow trout >4.0 mg/L.

Algae : EC₅₀ (96 and 120h) for *Selenastrum* > 3.9 mg/L

Worms: LC₅₀ (14d) for earthworms > 1213 mg/kg soil.

Other aquatic species: *Daphnia magna*, LC50 (48h) 3.7 mg/L (ref says 420 mg/L).

Other beneficial species: Highly specific to lepidopterous species, no significant impact on members of other insect orders.

Persistence in animals: Rapidly absorbed, metabolised via phase II conjugation and eliminated.

Persistence in soil/environment: Rapidly degraded in biologically active soils under aerobic conditions. DT₅₀ 13-20days.

Soil DT₅₀ 24–43days (20 °C), DT₉₀ 80–143days(20 °C). K_d 0.05–0.7. In water, DT₅₀ 15 days (pH 5, 20 °C). The above information refers to Methoxyfenozide.

13) Disposal Considerations:

Waste Disposal: In accordance with local and national regulations.

May be to waste disposal site or incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Can be land-filled or incinerated in compliance with local regulations. 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 chemicals 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 NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.

Contaminated packaging should be disposed of as product waste. Empty containers can be land-filled after cleaning in accordance with local and national regulations.

Do not transport if this container is damaged or leaking.

14) Transportation Information:

UN Number: N/R

Road transport ADR/RID

Class: Not dangerous goods.

Shipping name: Contains hazardous substance (Methoxyfenozide)

Not regulated for transport

Maritime transport: IMDG

Class: Not dangerous goods.

Shipping name: Contains hazardous substance (Methoxyfenozide)

Not regulated for transport

Transport in bulk according to Annex I or II according to MARPOL 73/78 and the IBC or IGC code: Not regulated for transport.

15) Regulatory Information:

Symbols: Xn - Harmful

Xi - Irritant

N – dangerous to the environment

Risk – Phrase:

R20/22 - Harmful by inhalation and if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin.

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

Safety – Phrase:

S3 - Keep in a cool place.

S8 - Keep container dry.

S1/2 - Keep locked up and out of the reach of children.

S 7 - Keep container tightly closed.

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

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

S23 - Do not breathe fumes/vapor/spray.

S24/25 - Avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves.

S28 - After contact with skin, wash immediately with plenty of water.

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

S46 - If swallowed, seek medical advice immediately and show this container.

S57 - Use appropriate containment to avoid environmental contamination.

Hazard Statements:

H400 - Very toxic to aquatic life

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

H411 - Toxic to aquatic life with long-lasting effects

H302 - Harmful if swallowed

H315 - Causes skin irritation

H373 - May cause damage to organs (Kidney) (Oral)

H336 - May cause drowsiness or dizziness

H340 - May cause genetic defects

H360 - May damage fertility or the unborn child

H412 - Harmful 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.

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