



MATERIAL SAFETY DATA SHEET

Revised edition no: 3

Date: 10/05/2013

Supersedes: 8/6/2009

WARLOCK 19.2 EC

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

Product name : Warlock 19.2 EC

Chemical name of Active ingredient : Emamectin:

Use : Insecticide

Company identification : ADAMA South Africa (Pty) Ltd
21 Viben Street
Brankenfell
7560

Emergency telephone Number : + 27 82 807 7102

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Components : This product is considered to be hazardous and contains hazardous components

Substance name	concentration%w/w	case no	EC No	Index No	Classification
solvesso 150	<80 w/v	64742-94-5	265-198-5	649-424-00-3	xn, R65 asp. Tox 1-H304
Emamectin Benzoate	1.92 w/v	155569-91-8	----	-----	not classified Not classified
N-methyl-2-pyrrolidone	8-15 w/v	872-50-4	212-828-1	606-021-00-7	Repr. Cat; R61 Xi; R36/37/38 ----- Repr. 1B -H360U Eye irrit 2-H319 Skin irrit. 2- H315 STOT SE 3-H335
Calcium Dodecylbenzenel-Phonate	5-10 w/v	26264-06-2	247-557-8	-----	Xi, R38-41 eye Dam 1-H318 skin irrit. 2-H315
2,6-Ditert-butyl-methylphenol	ca 1w/v	128-37-0	----	----	Xn; R22 Xi, R36/38 N, R51-53 Acute Tox. 4-R302 Aquatic Chronic 2 - H411

3. HAZARDS IDENTIFICATION

Most important hazards : Harmful if swallowed

Environmental hazard : Very toxic to aquatic organisms

4. FIRST – AID MEASURES

First aid measures

Inhalation : Remove victim to fresh air. Keep victim warm and Rest. If breathing is difficult, give oxygen. Obtain medical attention

Skin contact : Remove affected clothing and wash all exposed skin area with soap and water, followed by warm

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water rinse. Consult a doctor in the event of any complaints

Eye contact

: Wash off with plenty of water. If pain persists, consult an eye specialist.

Ingestion

: Do not induce vomiting. Wash mouth with plenty of water. Never give anything by mouth to an unconscious person. If breathing is difficult, give oxygen. Get medical attention

Most important symptoms and effects, both acute and delayed.
Indication of any immediate medical attention and special treatment needed.

Note to physician

: No specific antidote known. Treat symptomatically and give supportive therapy

5. FIRE – FIGHTING MEASURES

Extinguishing media

: Dry chemical, water spray, foam, carbon dioxide

Hazardous thermal decomposition

: Hydrogen Cyanide, nitrogen oxides (NO, NO₂), carbon oxides (CO, CO₂).

Protection against fire

: Wear proper protective equipment. Self-contained breathing apparatus

Special procedures

: Fight fires from a protected location. Dike fire control water for later disposal. Use water spray cautiously to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions


: Wear suitable protective clothing.

Environmental precautions

: Dispose of this material and its container at hazardous or special waste collection point in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.

Methods for cleaning up

: In the event of minor spillage. Absorb in sand or other inert material. Use appropriate container to avoid environmental contamination. Ventilate area. Remove all sources of ignition. Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

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7. HANDLING AND STORAGE

Precautions for safe handling	: Do not breathe fumes. Avoid contact with skin and eyes
Storage	: Keep locked up and keep container tightly closed. Keep only in the original container in a cool well ventilated place. Keep away from strong oxidizing agents, strong bases. Keep away from sources of ignition-No smoking. Avoid excessive heat.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION

Engineering measures	: Ventilation required. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Wash clothing before re-using. Wash hands thoroughly after handling.
Personal protective equipment	
Respiratory system	: During spraying, wear suitable respiratory equipment.
Skin and body	: Wear suitable protective clothing. Chemical resistant boots
Hands	: Chemical resistant gloves
Eyes	: Safety goggles or face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State at 20 °C	: Liquid
Colour	: Slightly yellow
Odour	: Sweet, faint odour
Odour threshold	: Not available
pH	: 5-8
Melting point/freezing point	: Not available
Initial boiling point-boiling range	: Not available
Flash point	: >61
Evaporation	: Not available
Flammability	: Not flammable
Explosion limits (lower-upper)	: Not available
Vapour pressure	: Not available
Vapour density	: Not available
Relative density	: 0.92-0.96 g/cc
Solubility	: Not available
Auto-ignition temperature	: 290
Decomposition temperature	: Not available
Viscosity	: Not available
Explosive properties	: Not available
Oxidising properties	: Not available

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10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions
Conditions to avoid : protect from sunlight and heat.
Hazardous decomposition : Thermal decomposition generates: carbon monoxide, carbon dioxide, NOx SOx

11. TOXICOLOGICAL INFORMATION

Toxicity information
Rat oral LD50 [mg/kg] : >2000
Rat dermal LD50 [mg/kg] : > 2000
Rat inhalation LC50 [mg/kg] : > 5.50
Dermal irritation (rabbit) : moderately irritating
Eyes Irritation (rabbits) : moderately irritating
Sensitization : Non sensitizer.
Germ cell mutagenicity : Not mutagenic
Carcinogenicity : Not carcinogenic
Reproductive toxicity : May cause harm to the unborn child

12. ECOLOGICAL INFORMATION

96 H-LC50 – Rainbow trout [mg/l] : 0.174
48 H-NOEC- Daphnia magna [mg] : 0.0099
Bees LD50 [ug] : 0.0036 – very toxic to bees
Birds LC50 [mg/kg] : 570(mallard duck)
Long-term exposure : Not available
Persistence – degradability : Rapidly degradable: soil, sunlight.
Bioaccumulative : Moderately

13. DISPOSAL CONSIDERATIONS

Disposal : Avoid release to the environment. Dispose in a safe in accordance with local/national regulations.


14. TRANSPORT INFORMATION

- **UN No.** : 3082
- **Proper shipping name** : Environmentally Hazardous substance, Liquid.
- **Packing group** : III
- **Class** : 9
- **H.I. nr:** : 90
- **IMDG-Marine pollution** : YES

15. REGULATORY INFORMATION

EU Classification : This product is provisionally labelled by the supplier in accordance with the supplier understanding of the EU regulations

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Risk phrases

: *R22* Harmful if swallowed
 : *R36/37/38* – irritating to eyes, respiratory system and skin.
 : *R41*- Risk of serious damage to eyes
 : *R51/53* – Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 : *R61* – May cause harm to the unborn child.
 : *R65* – Harmful: may cause lung damage if swallowed.

Safety Phrases

: *H302*: Harmful if swallowed
 : *H304*-May be fatal if swallowed and enters airways
 : *H315* – causes skin irritation
 : *H318* – Causes serious eye damage
 : *H319* – causes serious eye irritation
 : *H335* – May cause respiratory irritation
 : *H360* – May damage the unborn child
 : *H411* - Toxic to aquatic life with long lasting effects

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16. OTHER INFORMATION

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