

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:	WARRIOR 480 EC
Creation Date:	June 2014
Revision Date:	August 2017
24 Hr Emergency Number:	082 771 2712
In case of poisoning:	
Poison Information Centre:	082 446 8946
Tygerberg Hospital:	(021) 931 6129
Poison Emergency Enquiries	(021) 689 5227
In case of Spillage:	
HAZMAT:	0800 147 112
Active ingredient:	Clomazone 480 EC
Chemical name:	2-[(2-chlorophenyl)methyl]-4,4-dimethyl-3-isoxazolidinone(CAS) Formula: C ₁₂ H ₁₄ ClNO ₂ CAS No.: 81777-89-1 UN No.: 1993
Risk phrases:	R10, R20/22, R36, R65, R51/53

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	Clomazone 480g/l
EEC no	
R phrases	R10, R20/22, R65, R36, R51/53

SECTION 3 - HAZARD IDENTIFICATION**MOST IMPORTANT HAZARDS:**

Adverse human health effects:	Harmful by inhalation and if swallowed Harmful: May cause lung damage if swallowed Irritating to eyes
Environmental effects:	Toxic to aquatic organisms May cause long-term adverse effects to the aquatic environment
Physical and chemical hazards:	
-Fire or explosion:	Flammable liquid May form flammable/explosive vapour-air mixtures. Burning and thermal decomposition may form toxic by-products
Carcinogenicity:	See section 11.
Mutagenicity:	See section 11.
Reproductive/teratogenicity	See section 11.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS**Inhalation:** Move the affected person to the fresh air. If the person feels unwell: Call a doctor immediately.**Skin contact:** Wash with soap and water. In case of redness or irritation, call a doctor**Eye contact:** Rinse immediately with plenty of water (for at least 15 minutes).**Ingestion:** Rinse mouth out with water. If the person is fully conscious, make him/her drink water. Never give an unconscious person anything to drink. Never attempt to induce vomiting. Call a doctor immediately.

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 5 - FIRE-FIGHTING MEASURES**Suitable extinguishing media:** Foam, Carbon dioxide (CO₂) Powders**Specific hazards:** May form flammable/explosive vapour-air mixtures. Toxic fumes are released**Specific Firefighting:** Isolate fire area. Evacuate downwind. Contain the extinguishing fluids by bunding (the product is hazardous for the environment) Do not attempt to fight the fire without suitable protective equipment. Do not breathe fumes.**Protection of fire fighter:** Self-contained breathing apparatus. Complete protective clothing**SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)****Personal precautions:**

In case of important spillage: Mark out the contaminated area with signs and prevent access to unauthorized personnel.

Environmental precautions:

Contain the spilled material by bunding (product is hazardous for the environment). Do not discharge into drains and rivers.

Methods for cleaning up: - Neutralization: Absorb spillage with:

- inert absorbent material.

- earth or sand

Follow by washing with:

- a 20% solution of potassium hydroxide in methanol

Cover the treated area with plastic and let stand for 24 h. Remove the covering and place in a drum for a later disposal.

- **Cleaning/decontamination:** Wash with plenty of water and detergent.- **Disposal :** Dispose of contaminated materials in accordance with current regulations.**SECTION 7 - HANDLING AND STORAGE REQUIREMENTS****HANDLING**

Technical measures: Vapour extraction at source

STORAGE:

Storage conditions: - Recommended: Store: - in a cool, dry area - in a well-ventilated area - away from heat - away from any flames. - Away from food and drinks and animal foodstuffs - Out of reach of children Packaging materials: -Recommended: Original packaging.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**Engineering control measures:** Ensure good ventilation of the work station Extraction to remove vapours at their source.**PERSONAL PROTECTIVE EQUIPMENT:****Respirator:** In the event of insufficient ventilation: Filtering respiratory protective device with a specific pesticide canister.**Clothing:** Impermeable suit (Hypalon, Tyvek, Saranex, PVC.)**Gloves:** Neoprene protective gloves.**Eye protection:** Safety spectacles with side shields**Hygiene measures:** Always wash your hands after handling the product. Do not eat, drink or smoke during use Always take a shower after work.**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance :	Liquid
Colour :	Straw yellow
Odour :	Aromatic
Flash point :	51.6°C (Closed cup)
pH (20°)(at 10g/l H₂O):	5.91 (Aqueous dispersion -1%)
Solubility in water :	An emulsion is formed. (Will mix with water)

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 10 - STABILITY AND REACTIVITY**Stability:** Stable at ambient temperature and under normal conditions of use.**Hazardous decomposition:** On thermal decomposition (pyrolysis), releases: Carbon oxides (CO, CO₂), Nitrogen chlorid, Chlorine**SECTION 11 - TOXICOLOGICAL INFORMATION****Acute oral LD₅₀:** 1406 mg/kg**Acute dermal LD₅₀:** >2000 mg/kg (Rabbit)**Acute inhalation LC₅₀ (4 h) :** 4.59 mg/l**Acute skin irritation:****Local effects:** Irritating to the eyes.**SECTION 12 - ECOLOGICAL INFORMATION****ECOTOXICOLOGY :**Birds: LD₅₀ (birds): >2510 mg/kg Effects on the aquatic environment: product as is : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**Fish:** LC₅₀ (Rainbow trout/96h): 31 mg/l**Daphnia:** EC₅₀ (Daphnia)/48h: 31 mg/l**Algae:** EC₅₀ (Algae)/72h: 12.5 mg/l**SECTION 13 - DISPOSAL CONSIDERATION****Pesticide disposal:**

Dispose of in accordance with relevant local regulations Incinerate at a licensed installation

CONTAMINATED PACKAGING:

Decontamination/cleaning: Clean with water. Recover the cleaning water and dispose of at a specialist site.

Destruction/disposal: Recycle following cleaning.

14. TRANSPORT INFORMATION**UN NUMBER:** 1993**ADR/IRD:**

Shipping name: Flammable liquid, n.o.s.(Clomazone 480 g/l)

Class: 3

Classification code: F1

Packaging group: III

Label: 3

Hazard ID no. 30

IMDG/IMO

Shipping name: Flammable liquid, n.o.s.(Clomazone 480 g/l)

Packaging group: III

Class: 3

Labels: 3

AIR/IATA

Shipping name: Flammable liquid, n.o.s.(Clomazone 480 g/l)

Class: 3

Hazard Label: Flammable liquid

Packaging Group: III

Passenger Aircraft: Y309 (max 10 L)

309 (max 60 L)

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

Cargo Aircraft 310 (max 220L)

Tremcard number 30GF1-III

15. REGULATORY INFORMATION

Symbol : Xn; F; N
Indication of danger : Harmful (Xn); Flammable; Dangerous to the environment.
Risk phrases : R10 : Flammable
R20/22: Harmful by inhalation and if swallowed
R65: Harmful : May cause lung damage if swallowEd
R36: Irritating to eyes
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases : S1/2: Keep locked up and out of the reach of children.
S29: Do not empty into drains.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment.
S62: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Indication of danger :
National legislation: In accordance with 91/155/EEC Directive and with French standard T 01-102 and the South African Occupational Health and Safety Act, 1993 (Act. No. 85 of 1993).

16. OTHER INFORMATION

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS 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 MSDS 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 the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

REFERENCES

- Applicable to own physical and chemical, toxicity and ecotoxicity research studies.
- MICROMEDEX, Environmental Health & Safety Series.
- The Pesticide Manual, Eleventh Edition; C.D.S.Tomlin.
- ADR-Vol. II (Annex B), January 1997.
- Dangerous Goods Regulations , IATA, 40th Edition, Effective 1 January 1999.