

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:** FARMAZONE 700 WG**Creation Date:** June 2014**Revision Date:** March 2021**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

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Active Ingredient(s)/ Hazardous Inert Ingredient(s)	CAS #	Exposure Limits	% Weight	% Volume
Amicarbazone Inert materials	129909-90-6	TWA ^a OSHA PEL ^b : None ACGIH TLV ^c : None NIOSH REL ^d : None	71,4 28,6	NA

Only the identities of the active ingredient(s) and any hazardous inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

*Source: *Guide to Occupational Exposure Values 2000*, published by ACGIH

^a**TWA:** Time-weighted average exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40 hour workweek.

^b**OSHA PEL:** Occupational Safety and Health Administration Permissible Exposure Limits.

^c**ACGIH TLV:** American Conference of Governmental Industrial Hygienists, Inc., Threshold Limit Values.

^d**NIOSH REL:** National Institute for Occupational Safety and Health Recommended Exposure Limits.

SECTION 3 - HAZARD IDENTIFICATION**EMERGENCY OVERVIEW****CAUTION:**

- HARMFUL IF SWALLOWED
- MAY CAUSE EYE IRRITATION
- KEEP OUT OF REACH OF CHILDREN

The toxicological, chemical and physical properties of this product have not been fully investigated and its handling or use may be hazardous. This product is intended for experimental use by qualified personnel only.

Acute Health Hazards

Eye: May cause slight irritation. The degree of the injury will depend on the amount and duration of the contact and the speed and thoroughness of the first aid treatment. Adverse effects resulting from an exposure may include temporary redness, swelling and pain.

Skin: A single, prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

Ingestion: Harmful if swallowed. Ingestion of this product may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Inhalation:

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Exposure to very high concentrations may result in respiratory irritation. Signs and symptoms may include nasal discharge, sore throat, coughing, and difficult breathing.

Chronic Health Hazards (Including Cancer): Amicarbazone Technical is not carcinogenic.

Teratology (Birth Defects) Information: Amicarbazone Technical is not teratogenic and it is not a reproductive toxicant.

Mutagenicity: Amicarbazone Technical is not a mutagenic.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call emergency services or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

SECTION 5 - FIRE-FIGHTING MEASURES

Flammable Limits in Air (% by volume):

Upper: Not flammable

Lower: Not flammable

Flash Point: Not applicable

Method Used: Not applicable

Autoignition Temperature: Not applicable

LEL/UEL: Not applicable

NFPA Hazard Classification:

Health: NDA

Flammability: NDA

Reactivity: NDA

Other: NDA

Extinguishing Media: Sprayed water jet, foam, extinguishing powder, CO2, sand

Special Fire Fighting Procedures: Fight fire in early stages if safe to do so. Wear respiratory protection. In well-ventilated areas: full-face mask with combination filter, e.g. ABEK-P2 (offers no protection from carbon monoxide). In enclosed premises: respirator with independent air supply. Contain firefighting water.

Unusual Fire/Explosion Hazards: NDA

Hazardous Combustion Products: In the event of fire, the formation of hydrogen cyanide, carbon monoxide and nitrogen oxides must be anticipated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Do not allow entry into drains or waterways. Take up spilled product with dust-binding material or suitable vacuum cleaner. Avoid formation of dust. Place collected spilled product and binding material into suitable closable container. Clean floor and other objects with a damp cloth. Place used cleaning materials into closable receptacles.

For personal protection refer to Section 8.

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SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read entire label. Use strictly in accordance with label precautionary statements and directions. READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL. Suitable container materials are LDPE (lowdensity polyethylene). When using open containers, use local exhaust ventilation to prevent dusts from spreading. Make provision for product and fire-fighting water to be retained.

Take precautions to prevent formation of explosive mixtures. Keep away from sources of ignition. No smoking. Keep container tightly closed. Prevent formation of dust deposits and whirling-up of dust.

For reasons of quality assurance, keep dry at temperatures under 40°C. Store so that unauthorized persons do not have access. Keep away from food, drink, and animal feed.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Eye Protection: Goggles.

Respiratory/Ventilation Requirements: Fine-dust mask.

Skin Protection: Protective gloves for chemicals.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white to beige granule
Odour:	Slight characteristic smell
Physical State:	Solid, granules
pH:	7 - 8
Boiling Point:	NDA
Melting Point:	137.5 °C (active ingredient)
Freezing Point:	NDA
Vapor Pressure	1.3 x 10 ⁻³ mPa (20 °C); 3.0 x 10 ⁻³ mPa (25 °C) (a.i.)
Vapor Density:	NDA
Bulk Density:	0,42 – 0,48 g/cm ³
Specific Gravity:	NDA
Evaporation Rate:	NDA
Solubility in Water:	4.6 g/l (pH 4-9, 20 °C); granule disperses in water
Percent Solids by Weight:	99% minimum
Partition Coefficient:	Kow logP = 1.18 (pH 4), 1.23 (pH 7), 1.23 (pH 9) (20 °C)
Percent Volatile:	NDA
Volatile Organic Compounds (VOC):	NDA
Molecular Weight:	241.3 (active ingredient)
Viscosity:	NDA

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable when stored as directed

Hazardous Polymerization: NDA

Flash Point: Not flammable

Flammable Point: Not flammable

Auto Ignition: Not flammable

Incompatibility With Other Materials: No known incompatibilities

Hazardous Decomposition Products:

Thermal decomposition generates high temperature hydrogen cyanide, carbon monoxide and nitrogen oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute (the following is based on Amicarbazone Technical):

Eye Irritation: Mild irritant (rabbit)

Skin Irritation: Non-irritant (rabbit)

Skin Sensitization: Not a contact sensitizer by the Buehler Method.

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Tel + 27 31 003 3486 • Fax + 27 31 502 5825Dermal Toxicity: LD₅₀ (rat): > 2,000 mg/kg.Oral Toxicity: LD₅₀ (rat): > 1,300 mg/kg (males) and 1,015 mg/kg (females).Inhalation Toxicity: 4-hr dust LC₅₀ (rat): > 2.0 mg/L (no deaths).

Chronic/Carcinogenicity: NOEL = 1.6 mg/kg/day (based on liver effects in dogs)

Teratology/Developmental Toxicity: NOEL = 20 mg/kg/day (rabbit). No evidence of developmental toxicity, malformations or variations in rabbits.

Mutagenicity: A Salmonella/mammalian microsome test (Ames assay) performed on the material in the presence and absence of metabolic activation gave no evidence of mutagenic activity. Reproductive Toxicity: NOEL = 100 ppm (rats). No evidence of reproductive toxicity.

Neurotoxicity: In an acute neurotoxicity study using rats, material was administered as a single oral dose at doses of 20, 150, or 600 mg/kg for males and 20, 100, or 400 mg/kg for females. The high dose for each sex produced severe toxicity, including mortality, and neuropathology in the most severely affected animals to survive treatment. Sub-lethal doses produced transient clinical signs and neurobehavioral changes as the only evidence of toxicity. The NOEL for neuropathology was 150 mg/kg for males and 100 mg/kg for females. In a preliminary series of safety pharmacology tests, mice were administered a single dose of the material by gavage at doses of 1, 20, or 100 mg/kg. Mild neuromuscular and sensorimotor disturbances were observed at the highest dose tested. From this series of studies, the overall NOEL was 1 mg/kg based on clinical signs of toxicity

SECTION 12 - ECOLOGICAL INFORMATION**Avian Toxicity (based upon technical material):**Northern bobwhite (C. virginianus) Oral LD₅₀ > 2,000 mg/kgNorthern bobwhite (C. virginianus) Diet LC₅₀ > 10,000 ppmMallard duck (A. platyrhinchus) Diet LC₅₀ > 10,536 ppm**Aquatic Organism Toxicity (based upon technical material):**Bluegill (L. macrochirus) 96 hr LC₅₀ > 120 mg/LRainbow Trout (O. mykiss) 96 hr LC₅₀ > 128 mg/LWaterflea (D. magna) 48 hr EC₅₀ = 40.8 mg/L**Other Non-Target Organism Toxicity (based upon technical material):**Honeybee (A. mellifera L.) 48 hr contact LD₅₀ > 200 µg/b**SECTION 13 - DISPOSAL CONSIDERATION**

End users must dispose of any unused product as per the label recommendations and in accordance with all applicable laws and regulations. Check governmental regulations and local authorities for approved disposal of this material.

14. TRANSPORT INFORMATION

D.O.T. Shipping Name:	Environmentally hazardous substance, solid, n.o.s.
Technical Shipping Name:	Amicarbazone 10%
Packing Group:	III
D.O.T. Class:	Hazard 9
U.N./N.A. Number:	UN3077
Product RQ (lbs):	NA
D.O.T. Label:	9
D.O.T. Placard:	9
Marine Pollutant:	Yes
IMO:	
IMO Label:	9, Marine Pollutant
IMO Placard:	9, Marine Pollutant
European Road/Rail:	
Class:	9

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15. REGULATORY INFORMATION

U.S Federal Regulations

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act):

All pesticides are governed under FIFRA. Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

CERCLA (Comprehensive Response Compensation, and Liability Act): NA

EPCRA (Emergency Planning and Community Right-to-Know Act) Section 313:

NA OSHA (Occupational Safety and Health Administration): NDA

RCRA (Resource Conservation and Recovery Act): NDA

SARA Title III (SUPERFUND Amendments and Reauthorization Act):

Section 302 (EHS) TPQ: NONE

Section 304 (EHS) RQ: NONE

Section 311/312 CATEGORIES	1. Immediate (Acute) Health Effects; Yes
	2. Delayed (Chronic) Health Effect; No
	3. Fire Hazard; NDA
	4. Sudden Release of Pressure Hazard; NDA
	5. Reactivity Hazard; NDA

TSCA (Toxic Substance Control Act): This product is exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

State Regulations: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

International Regulations: EEC Classification: Xn HARMFUL

Risk Phrases: R22: Harmful if swallowed

Safety Phrases: S22: Do not breathe dust

16. OTHER INFORMATION

The information in this MSDS is based on data available to us as at the date given herein, and believed to be correct. Contact FarmAg to determine if additional data and information have become available since the revision date.

Judgments as to the suitability of information herein for the individual's own uses or purposes are necessarily the individual's own responsibility. Although reasonable care has been taken in the preparation of such information, FarmAg International extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the individual's purposes or the consequences of its use.