

SAFETY DATA SHEET

Issue No: 5.7	Revision date: 12 April 2024 First print date: 19 October 2002
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	MEGACIDE
Other means of identification:	Guazatine 210 g/ℓ
Recommended Use:	Agricultural Fungicide
Supplier:	ICA International Chemicals (Pty) Ltd
Address:	28 Planken Street Plankenbrug Industrial STELLENBOSCH · 7600 · SOUTH AFRICA
Telephone No:	+27-21 886 9812
Fax No:	+27-21 886 8209
Emergency Tel No:	Griffon Poison Information Centre: +27-82 446 8946 Human Poison Helpline: +27-861 555 777

2. HAZARD IDENTIFICATION

GHS Classification of product	Acute Toxicity Oral – Category 4 Acute Toxicity Dermal – Category 5 Acute Toxicity Inhalation – Category 2 Skin Damage/Irritation – Category 2 Eye Damage/Irritation – Category 1 STOT SE – Category 3 Aquatic Acute – Category 2 Aquatic Chronic – Category 2
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Label Elements
Classification and Labelling of Chemicals (GHS) Rev 9, 2021; Regulation EC No. 1272/2008 [EU-GHS/CLP]



Signal word	DANGER
Hazard Statements	H302 – Harmful if swallowed H313 – May be harmful in contact with skin H315 – Causes skin irritation H330 – Fatal if inhaled H318 – Causes serious eye damage H335 – May cause respiratory irritation H411 – Toxic to aquatic life with long lasting effects

General Precautionary Statements	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children.
Prevention Precautionary Statements	P203: Obtain, read, and follow all safety instructions before use. P260: Do not breathe mist, vapors and spray. P264 + 265: Wash hands thoroughly after handling. Do not touch eyes. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves, protective clothing, eye and face protection. P284: In case of inadequate ventilation: Wear respiratory protection.
Response Precautionary Statements	P301 + P317: IF SWALLOWED: Get medical help. P302 + P317: IF ON SKIN: Get medical help. P304 + 340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P354 + P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P316: IF INHALED: Get emergency medical help immediately.

P317: IF IN EYES: Get emergency medical help.

P319: Get medical help if you feel unwell.

P320: Specific treatment is urgent see first aid measures.

P330: If swallowed, rinse mouth.

P333 + P317: If skin irritation or rash occurs: Get medical help.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

Storage Precautionary Statements

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal Precautionary Statements

P501: Dispose of contents and container in accordance with national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS NO:	CONCENTRATION % (w/v)	CLASSIFICATION EC 1272/2008
Guazatine	115044-19-4	21	Acute Oral Toxicity Category 4, H302; Acute Dermal Toxicity Category 4, H312; Skin Irritation Category 2, H315; Eye Damage Category 1, H318; Acute Inhalation Toxicity 2, H330; STOT SE Category 3, H335; Aquatic Acute Category 1, H400; Aquatic Chronic Category 1, H410

There are no additional ingredients present which, within the current knowledge of the provider of this SDS, and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. See section 16 for legend of additional H-phrases not in section 2.

4. FIRST AID MEASURES

Show this SAFETY DATA SHEET to a doctor.

INHALATION:

- Remove the victim from immediate source of exposure. Move victim to fresh air, if it can be done safely, and keep comfortable.
- If victim's breathing has stopped, perform artificial respiration.
- DO NOT perform mouth-to-mouth resuscitation if victim ingested or inhaled the substance; wash face and mouth before giving artificial respiration. Use a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if victim's breathing is difficult or irregular.
- Get medical help immediately.

SKIN:

- Remove and isolate contaminated clothing, shoes, and leather goods immediately and take a shower.
- Rinse affected areas (skin) immediately with non-abrasive soap or mild detergent and large amounts of running water. Wash contaminated clothing before reuse.
- Get medical help if irritation develops and persists.

EYES:

- Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
- Seek medical help if irritation continues.

INGESTION:

- If swallowed, DO NOT induce vomiting, unless instructed to do so by poison control center or doctor.
- Have person sip a glass of water if able to swallow
- Never give anything by mouth to an unconscious person.
- If vomiting does occur, keep on giving fluids. Get medical help.

NOTE TO PHYSICIAN:

- There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient.

POTENTIAL HEALTH EFFECTS, ACUTE AND DELAYED

- Effects of exposure (inhalation, ingestion, or skin contact) to substance may be delayed.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Small fires: Dry chemical powder, carbon dioxide (CO ₂), water spray or alcohol-resistant foam
FIRE INVOLVING TANKS:	Large fires: Water spray, fog, or alcohol-resistant foam Cool containers with flooding quantities of water until well after fire is out. DO NOT get water inside containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.
UNSUITABLE EXTINGUISHING MEDIA:	DO NOT use high volume water jet, due to contamination risk.
SPECIFIC EXTINGUISHING METHODS:	Fight fire from maximum distance. For massive fire, use unmanned hose holder or monitor nozzles. Collect contaminated extinguishing water separately; do not allow contaminated water to reach the sewage or effluent systems.
SPECIFIC HAZARDS ARISING FROM COMBUSTION PRODUCTS:	In case of fire, the formation of Carbon monoxide (CO), Nitrogen oxides (NO _x), Hydrogen chloride (HCl), Hydrogen fluoride (HF), Hydrogen cyanide (HCN), Formaldehyde (CH ₂ O), Oxygen (O ₂), or Phosgene (COCl ₂) can be expected.
PRECAUTIONS FOR FIRE FIGHTERS:	Fire fighters should wear full protective gear including self-contained breathing apparatus (SCBA). Fight fire from safe distance. Contact with the fumes and vapours should be avoided by staying upwind. Clean all clothing before reuse. Severely contaminated clothing cannot be adequately decontaminated and must be disposed as a hazardous waste. Shower with soap and water after contact with chemical product.
FURTHER INFORMATION:	<ul style="list-style-type: none"> · If possible, safely move undamaged intact containers away from the area around the fire. · Keep containers cool by spraying with water if exposed to fire. · Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. · In case of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK:	
PERSONAL PRECAUTIONS:	Avoid contact with skin and eyes. Do not touch or walk through spilled material. Do not inhale spray or fumes.
PROTECTIVE EQUIPMENT:	Wear personal protective clothing and equipment (see section 8).
EMERGENCY PROCEDURES:	Keep people and animals away. Use water spray to reduce vapours or divert vapour cloud drift.
ENVIRONMENTAL PRECAUTIONS:	PREVENT spilled material from entering waterway and sewer systems, basements, and confined areas. If the product contaminates rivers and lakes or waterways immediately inform respective authorities.
METHODS AND MATERIALS FOR CONTAINMENT:	Contain and absorb liquid spills with inert material, remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in clearly marked waste containers.
METHODS AND MATERIALS FOR CLEANING UP:	Contain spillage, and then collect with non-combustible absorbent material, (e.g., sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean, non-sparking tools to collect absorbed material.
SECONDARY DISASTER PREVENTION MEASURES:	NA

7. HANDLING AND STORAGE

7.1: PRECAUTIONS FOR SAFE HANDLING:	<ul style="list-style-type: none"> · Always store in original containers, which include the label listing ingredients, directions for use, and first aid steps in case of accidental poisoning. · Never transfer to soft drink bottles or other containers. Children or others may mistake them for something to eat or drink. · Wear suitable protective clothing which include chemical-resistant overalls, footwear, socks, dust mask, eye shields and gloves. · Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Wash hands, arms, and face after application. Wash gloves and contaminated protective clothing daily before reuse.
<ul style="list-style-type: none"> - Suitable Technical Measures - Suitable Precautions - Prevention of contact 	

7.2: CONDITIONS FOR SAFE STORAGE:

- Suitable Technical Measures
- Separation measures from incompatible substances and mixtures

- Keep out of reach of unauthorized persons, children, and animals. Always store in their original containers, closed with original cap and the original label, in a cool, dry, and well-ventilated area out of direct sunlight.
- Segregate from foods and animal feeds.
- DO NOT reuse the container for any other purpose.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ADI – Acceptable Daily Intake	0.0048 mg kg ⁻¹ bw day ⁻¹
AOEL – Accepted Operator Exposure Level	0.002 mg kg ⁻¹ bw day ⁻¹
NATIONAL EXPOSURE STANDARDS:	Not available
BIOLOGICAL LIMIT VALUES:	Not available
ENGINEERING CONTROLS:	Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. If airborne mist/vapours are generated use local exhaust ventilation controls. Facilities should be equipped with an eyewash station and a safety shower. Where necessary, seek additional occupational hygiene advice.
PERSONAL PROTECTIVE EQUIPMENT:	<p>Respiratory Protection: Where exposure through inhalation may occur when handling and/or when preparing the spray mixture, wear a face mask. If the product is used in confined spaces a respirator suitable for protection from dusts and mists of pesticides is adequate.</p> <p>Hand Protection: Wear chemical-resistant gloves made of any waterproof material such as nitrile rubber. Glove thickness: 0.5 mm</p> <p>Eye Protection: Use of safety goggles (full-face shield).</p> <p>Skin and Body Protection: Wear suitable protective clothing which include chemical-resistant overalls, footwear, socks, dust mask, eye shields and gloves. Remove and wash contaminated protective clothing daily.</p>

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOUR:	Yellow to brown liquid
ODOUR:	Chemical odour
MELTING POINT / FREEZING POINT °C:	Not available
BOILING POINT:	Not available
DECOMPOSITION TEMPERATURE (a.i):	165 °C
FLAMMABILITY:	Not applicable
EXPLOSIVE LIMITS:	Not applicable
FLASH POINT:	Not applicable
AUTO-IGNITION TEMPERATURE:	Not applicable
PH (1% IN WATER):	5.0 – 7.0
KINEMATIC VISCOSITY:	Not available
	$\text{Kinematic viscosity} = \frac{\text{Dynamic viscosity (mPa/s)}}{\text{Density (g/cm}^3\text{)}}$
VISCOSITY:	Not available
DENSITY / RELATIVE DENSITY:	~ 1.037 g/mℓ
SOLUBILITY - WATER (a.i):	Freely soluble, 6 000 g/ℓ
N-OCTANOL / WATER PARTITION COEFFICIENT (a.i):	Log P _{ow} = -4.0
VAPOUR PRESSURE (a.i):	Not available
RELATIVE VAPOUR DENSITY:	Not available

10. STABILITY AND REACTIVITY

REACTIVITY:	Stable under normal conditions no reaction with fire-fighting water.
CHEMICAL STABILITY:	Stable under normal use and storage conditions for at least 2 years.
HAZARDOUS REACTION:	Hazardous polymerization is not expected to occur.
CONDITIONS TO AVOID: (e.g. – heat, pressure, static discharge, shock, or vibration)	Avoid storage in moist or hot conditions, near to heat or ignition sources. Keep away from food, drink and open bodies of water.

INCOMPATIBLE MATERIALS:

None specified, strong acids, strong oxidizers, strong bases, anionic compounds, organic material, reducing agents, oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

When heated to decomposition, irritant or dangerous fumes/vapours may be emitted. See section 5.

11. TOXICOLOGICAL INFORMATION
ANIMAL ACUTE TOXICITY DATA (ATE)

ORAL:	LD ₅₀ (rat) 300 – 400 mg a.i. /kg bw	Category 4
DERMAL:	LD ₅₀ (rat) > 2000 mg a.i. /kg bw	Category 5
INHALATION:	LC ₅₀ (4h) rat = 0,24 mg/ℓ (mist)	Category 2
SKIN IRRITATION / CORROSION:		Category 2
SERIOUS EYE IRRITATION / DAMAGE:		Category 1
RESPIRATORY OR SKIN SENSITIZATION:		Not Classified
GERM CELL MUTAGENICITY:		Not Classified
CARCINOGENICITY:		Not Classified
REPRODUCTIVE TOXICITY:		Not Classified
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE:		Category 3
SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE:		Not Classified
ASPIRATION HAZARD:		Not Classified

12. ECOLOGICAL INFORMATION
ECOTOXICITY:

GUAZATINE	Birds: LD ₅₀ (oral)	<i>Columba livia</i> Acute LD ₅₀ 57.9 mg/kg bw/day <i>Colinus virginianus</i> LC ₅₀ /LD ₅₀ 164 mg/kg diet <i>Coturnix japonica</i> Chronic NOEL = 18.9 mg/kg bw/day
	Fish: LC ₅₀	<i>Lepomis macrochirus</i> Acute (96h) LC ₅₀ = 0.42 mg a.i./ℓ <i>Oncorhynchus mykiss</i> NOEC = 0.044 mg a.i./ℓ (21-day)
	Aquatic invertebrates	<i>Daphnia magna</i> (Water flea) Acute (48h) EC ₅₀ = 0.15 mg a.i./ℓ Chronic (21-day) NOEC = Not available
	Algae – EC ₅₀ / NOEC	<i>Raphidocelis subcapitata</i> Acute (72h) EC ₅₀ = 0.0135 mg a.i./ℓ Chronic (96h) NOEC = Not available
	Bees	<i>Apis mellifera</i> Acute contact 48-hour LD ₅₀ = Not available Acute oral 48-hour LD ₅₀ = > 59 (µg bee-1)
	Earthworms: LC ₅₀ /NOEC	<i>Eisenia foetida</i> Acute (14-day) LC ₅₀ = 3 420 mg a.i./kg d.w. soil Chronic NOEC = 14.4 mg a.i./kg d.w.

AQUATIC TOXICITY:
Summation Method

 Aquatic Acute – Category 2
 Aquatic Chronic – Category 2

PERSISTENCE, DEGRADABILITY AND MOBILITY:

 Non-persistent in the soil and non-mobile.
 DT₅₀ field soil = 18 days
 K_{oc} = 25000

BIO-ACCUMULATIVE POTENTIAL:

BCF = 0.04 (low potential)

SOIL MICRO-ORGANISMS:

Not available – non-mobile, rapidly biodegraded, no adverse effect expected

13. DISPOSAL CONSIDERATIONS

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities.

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert empty container over mix or spray tank and allow draining for at least 30 seconds until flow has slowed to a drip. Triple rinse the empty container with clean water equal to a minimum of 30 % of the volume of the container. Add rinsing to the contents of the spray tank. Offer container for recycling or puncture and dispose of at authorised landfill (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

14. TRANSPORT INFORMATION

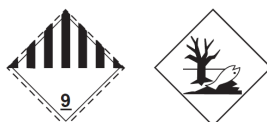
UN NUMBER: 3082

UN PROPER SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (GUAZATINE 21%)

TRANSPORT HAZARD CLASS(ES): Class 9

PACKING GROUP: III

TRANSPORT PICTOGRAMS:



ENVIRONMENTAL HAZARD: Marine Pollutant: Yes – Category 2

TRANSPORT IN BULK: Not applicable, not to be transported in bulk.

SPECIAL PRECAUTIONS FOR USER: Not applicable

15. REGULATORY INFORMATION

Conform to South African Regulation for Hazardous Chemical Agents, 2021.

Product: South African registration number L7126, Act 36 of 1947.

SDS valid for five years from date of issue.

16. OTHER INFORMATION

Legend: Full text of H-Statements referred to under sections 3:

H312 – Harmful in contact with skin

H318 – Causes serious eye damage

H330 – Fatal if inhaled

H400 – Very toxic to aquatic life

H410 – Very toxic to aquatic life with long lasting effects

Key literature references and sources of data: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 10, 2023. UN Model Regulations Rev. 23 (2023). EU REGULATION (EC) No 1272/2008.

This Safety Data Sheet (SDS) summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how to prevent accidents in the normal workplace including in conjunction with other products.

The information was obtained from sources which we believe are reliable. However, the information is provided in good faith. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and for these reasons we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used for this product only.

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END of SDS