

Safety Data Sheet

FOLIA BORON

SDS No: SDS188/000

Effective Date: 15/09/2022

Revision no: 000

Product Code: 188

SECTION 1

COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

Product Name: FOLIA Boron

Chemical Identifier: 2-Aminoethanol Borate

Product Use: Fertiliser

Restrictions on use: Agriculture

Supplier:

In Line Trading 112 (Pty) Ltd. (Co. Reg. No. 2003/008663/07)

Cedar Lake Industrial Estate,

C/O M57 & Porcelain Roads, Olifantsfontein, 1666, Gauteng, RSA

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Emergency Contact Numbers

Griffon Poison Information:

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SECTION 2

HAZARDS IDENTIFICATION

Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

| Hazard Classes | Hazard Category | Hazard Statement Code | Hazard Statements |
|-----------------------------------|-----------------|-----------------------|---|
| Health | | | |
| Acute toxicity (oral) | - | - | - |
| Acute toxicity (dermal) | - | - | - |
| Acute toxicity (inhalation) | - | - | - |
| Skin corrosion/irritation | 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation | 2A | H319 | Causes serious eye irritation |
| Reproductive toxicity | 1B | H360FD | May damage fertility; May damage the unborn child |
| STOT RE | - | - | - |
| Environmental | | | |
| Aquatic (acute) | - | - | - |
| Aquatic (chronic) | - | - | - |

Label elements: labelling as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard pictograms



Signal word - Danger

Precautionary statements

| | |
|----------------|---|
| P102 | Keep out of reach of children. |
| P203 | Obtain, read and follow all safety instructions before use. |
| P264+P265 | Wash hands thoroughly after handling. Do not touch eyes. |
| P280 | Wear protective gloves and eye protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P332+P317 | If skin irritation persists: Get medical help. |
| P337+P317 | If eye irritation persists: Get medical help. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local regulations. |

Special labelling of certain mixtures – None known

Other hazards – None known

Toxicity: Classification according to GHS: Not classified

SECTION 3 **COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/Mixture: Mixture

Declared Active Ingredients:

| Chemical name | CAS No. | EC No. | Conc. %w/w | Classification Regulation (EC) 1272/2008 |
|-----------------------|------------|-----------|------------|--|
| 2-Aminoethanol Borate | 10377-81-8 | 233-829-3 | 30 – 60 | H315, H319, H360FD |

SECTION 4 **FIRST AID MEASURES**

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.

INHALATION: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists.

SKIN: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

EYES: Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. If eye irritation persists, seek medical attention.

INGESTION: Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water and give 2 to 3 glasses of water to drink.

IMPORTANT ACUTE EFFECTS: Causes skin irritation.

Causes serious eye irritation.

IMPORTANT DELAYED EFFECTS: May damage fertility and the unborn child.

NOTE TO PHYSICIAN: This product contains Boric Acid and Monoethanolamine Borate, treat symptomatically and supportively.

SECTION 5 **FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: Use dry chemical, water fog or foam.

Unsuitable Extinguishing Media: High volume water jet.

Specific hazards: None.

Special Fire Fighting Procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

Personal protective equipment: Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear.

SECTION 6 **ACCIDENTAL RELEASE MEASURES**

Personal Precautions: Avoid contact with skin and eyes. Do not breathe in spray mist or fumes. Ventilate area of spill or leak, especially in contained areas.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. Any spillages or uncontrolled discharges into water sources should be reported immediately to the police and the Department of Water/Environmental Affairs.

Methods & Materials for Containment: Contain spilled product by diking area with sand or earth.

Methods & Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spill material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To

decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

SECTION 7 **HANDLING AND STORAGE**

HANDLING

Precautions for safe handling:

Avoid contact with skin and eyes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use.

General occupational hygiene:

Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used

STORAGE

Conditions for safe storage:

Keep out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed, in an isolated, dry, cool and well-ventilated area. Avoid direct sunlight for prolonged periods, don't let product freeze. Not to be stored next to foodstuffs, feed and water supplies.

Incompatible substances and mixtures: Alkaline materials including Bordeaux mixtures and lime sulphur.

Packaging material: Plastic containers and drums.

SECTION 8 **EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Occupational exposure limits:

| Limit value type (country) | Substance name | EC No. | CAS No. | Occupational exposure limit value | | Monitoring & observation processes | Peak limitation | Source |
|----------------------------|----------------|-----------|------------|-----------------------------------|--------------------------------|------------------------------------|-----------------|-------------------------------|
| | | | | Long term | Short term | | | |
| TWA | Boric Acid | 233-139-2 | 10043-35-3 | - | 6 mg/cu m (inhalable fraction) | - | - | Hazardous Substance Data Bank |

ENGINEERING CONTROLS:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT

| | |
|----------------------------------|---|
| Respiratory Protection: | For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator. |
| Hand Protection: | The use of chemically protective gloves is recommended to prevent against skin contact. |
| Eye Protection: | The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices. |
| Skin and Body Protection: | Wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. |
| Emergency eyewash: | Where there is any possibility that a handler's eyes may be exposed to this substance; an eye wash fountain should be provided or appropriate alternative within the immediate work area for emergency use. |

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

| Property | Value/description | Method |
|---------------------------------------|-------------------|---------------|
| Physical state | Liquid | Visual |
| Colour | Orange Yellow | Visual |
| Odour | Distinct odour | Organoleptic |
| pH (1% aqueous dilution) | 8.3 – 9.2 | CIPAC MT 75.3 |
| Melting/Freezing point | Not available | |
| Boiling point | Not available | |
| Flash point | Not available | |
| Flammability | Not available | |
| Vapour pressure | Not available | |
| Relative Vapour Density | Not available | |
| Density | 1.259 – 1.391 | Pycnometer |
| Solubility | Soluble in water | |
| n-Octanol/Water partition coefficient | Not available | |
| Auto-ignition temperature | Not available | |
| Decomposition temperature | Not available | |
| Viscosity | Not available | |
| Explosive properties | Not explosive | |
| Oxidising properties | Not oxidative | |

SECTION 10 STABILITY AND REACTIVITY

| | |
|--|--|
| Chemical Stability: | The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight. |
| Reactivity: | Stable and non-reactive under normal conditions |
| Possibility of Hazardous Reactions: | No data available. |
| Conditions to Avoid: | Extreme heat or exposure to flames. |
| Incompatible Materials: | Strong oxidizing agents. |

Hazardous Decomposition Products: None known.

SECTION 11
TOXICOLOGICAL INFORMATION

GHS Classification: Causes skin irritation (H315)
Causes serious eye irritation (H319)
May damage fertility; May damage the unborn child (H360FD)

| Toxicity | Effective dose/ concentration | Value | Species | Method |
|--|--|----------------|---------|------------------------|
| Acute Oral | LD ₅₀ | Not classified | Rat | GHS ATE Calculation |
| Acute Dermal | LD ₅₀ | Not classified | Rabbit | |
| Acute Inhalation | LC ₅₀ | Not classified | Rat | |
| Skin irritation | Causes skin irritation | | | |
| Eye damage/irritation | Causes serious eye irritation | | | |
| Skin sensitization | Not classified as a skin sensitizer | | | |
| Respiratory sensitization | Not known to be a respiratory sensitizer | | | |
| Mutagenicity/Genotoxicity: | Not classified as a mutagen and not genotoxic | | | |
| Carcinogenicity | Not classified as a carcinogen | | | |
| Reproductive toxicity | May damage fertility and the unborn child | | | |
| Single target organ toxicity: | Not classified as a single target organ toxicant | | | |
| Chronic effects (e.g developmental) | None known | | | |

SECTION 12
ECOLOGICAL INFORMATION

GHS Classification: Not classified

| Toxicity | Effect dose/ concentration | Value | Test duration | Species | Method |
|--|--|---------------|------------------|---------|--------|
| Aquatic Fish Crustacea Algae | LC ₅₀ NOEC EC ₅₀ NOEC EC ₅₀ | Not available | - | - | - |
| Terrestrial Birds Bees Earthworms/Arthropods | LD ₅₀ LC ₅₀ LD ₅₀ (contact) LD ₅₀ (oral) - | Not available | - | - | - |

ENVIRONMENTAL EFFECTS

Persistence and degradability:

Persistence is unlikely.

Bio-accumulative Potential:

Highly water soluble materials are unlikely to bioaccumulate to any significant degree, and borate species are all present essentially as undissociated boric acid at neutral pH. The octanol/water partition coefficient for boric acid has been measured as 0.175, indicating low bioaccumulation potential.

Mobility in soil:

Due to its water solubility, it is likely to be mobile in the soil.

Other adverse effects:

Not determined

SECTION 13
DISPOSAL CONSIDERATIONS

Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Waste: Open dumping or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Container: Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

SECTION 14
TRANSPORT INFORMATION

UN Number: Not Regulated

Road Transport ADR/IRD:

Class: Not classified

Packaging group: Not applicable

UN Proper Shipping Name: Not applicable

Maritime Transport IMDG/IMO:

Class: Not classified

Packaging group: Not applicable

UN Proper Shipping Name: Not applicable

Marine Pollutant (Y/N): No

Air Transport IATA/ICAO:

Class: Not classified

Packaging group: Not applicable

UN Proper Shipping Name: Not applicable

Special/Environmental Precautions: None.

Transport in bulk: Not available.

SECTION 15
REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture: OSHA 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008

Other national regulations: None.

Chemical Safety Assessment carried out: No chemical safety assessment was carried out for this product.

SECTION 16
OTHER INFORMATION

PACKAGING: Packed in 500 mL, 1 L, 5 L, 10 L, 20 L, 25 L, 210 L and 1000 L plastic containers and drums, labelled according to South African regulations and guidelines.

DISCLAIMER:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.