

SAFETY DATA SHEET

ACCORDING TO THE SOUTH AFRICAN REGULATIONS FOR HAZARDOUS CHEMICAL AGENTS - 2021

ULTRABOR

Revised on / Version: 01/08/2022 / 0004

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Replaces Revision of / Version: 30/06/2019 / 0003

SECTION 1: Product and Company Identification

Identification of the product/preparation

Product Name:	Ultrabor
Trade Name/Synonyms:	Ultrabor
Registration Number:	B2958
Product Description and Type:	Water soluble boric acid powder formulation for use as a boron fertilizer in foliar feeding, fertigation and soil application.

Active Ingredient

Formula:	H ₃ BO ₃
CAS Number:	10043-35-3

Supplier

Company Name: Rolfes Agri (Pty) Ltd
 Address: 288 Mundt Street
 Waltloo
 Pretoria
 South Africa
 Phone Number: +27(0)12 803 0145
 E-mail Address: info@rolfesagri.co.za

Emergency contact details

Office Hour Poisoning Helpline
 Rolfes Agri (Pty) Ltd.
 Tel: +27 (12) 803 0145

Spill Response and Transport incidents
 Spill Tech, Oil and chemical pollution control
 Tel: +27 (86) 100 0366/ +27 (83) 253 6618
 www.spilltech.co.za

Relevant identified uses of the product and uses advised against



For use in Agriculture and use as per the product label.

SECTION 2: Hazards Identification

Classification of the substance or mixture

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals and the Regulations for Hazardous Chemical Agents 2021.

Classification:

Hazard class	Category	Hazard Statement Number
Reproductive Toxicity	Category 1B	H360
Hazardous to the Aquatic Environment, Acute Hazard	Category 3	H402

Label Elements

South Africa. GHS classification and labelling of chemicals and the Regulations for Hazardous Chemical Agents 2021.

Pictograms:



Signal Word:

Danger!

Hazard Statements:

Statement Number	Hazard Statement
H360:	May damage fertility or the unborn child
H402:	Harmful to aquatic life

Precautionary Statements:

General –

Statement Number	Precautionary Statement
P101:	If medical advice is needed, have container or label at hand.
P102:	Keep out of reach of children.
P103:	Read carefully and follow all instructions.

Prevention –

Statement Number	Precautionary Statement
P203	Obtain, read, and follow all safety instructions before use.
P263:	Avoid contact during pregnancy and while nursing.
P273:	Avoid release to the environment.
P280	Wear dust mask when handling this product.

Response -

Statement Number	Precautionary Statement
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ULTRABOR

P318:	If exposed or concerned, get medical advice.
P391:	Collect spillage.

Storage -

Statement Number	Precautionary Statement
P405:	Store locked up.

Disposal -

Statement Number	Precautionary Statement
P501:	Empty all pesticides from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler. Do not use empty containers for any other purpose.

Other Hazards

None.

SECTION 3: Composition/Information on Ingredients**Mixture**

Common Name:	Boric Acid
IUPAC/Chemical Name:	Boric Acid
Chemical Family:	
Formulation:	Boron 170 g/kg

Ingredients with Hazard Concerns (GHS)

According to UN GHS criteria.

Hazardous Component	CAS Number	Weight - %	GHS Classification
Boric Acid	10043-35-3	98.32	Reproductive Toxicity 1A
Fatty Alcohol Ethoxylate	68439-50-9	1.18	Aquatic Acute 1 M Factor = 1 Aquatic Chronic 3 Eye Damage 1

NOTE: There are no other ingredients present according to the current knowledge of the supplier (considering their concentrations present in the product) that are classified as hazardous to health or the environment and that cause/contribute to the correct GHS classification of this product. These ingredients are therefore, in terms of the South African Hazardous Chemical Agent Regulations 2021; Regulation 14(b), not listed.

SECTION 4: First-Aid Measures**Description of First-aid Measures**

General Advice	The symptoms resulting from direct exposure to the product could appear a while after exposure. If there is persistent discomfort, seek medical attention. Provide this SDS to medical personnel for treatment. Immediately remove contaminated clothing and remove the affected person from the contamination area. Keep the person warm, calm and covered up. First Aid personnel should pay attention to their own safety.
Eye Contact	Flush eyes with water as a precaution.

Skin Contact	Remove all contaminated clothing and shoes. Wash contaminated clothing before re-use. Rinse the skin immediately with plenty of water.
Inhalation	Remove the affected victim from exposure to an area with fresh air as a precaution. If not breathing, administer artificial respiration. With the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain immediate medical attention.
Ingestion	If exposed or concerned, get medical advice. If conscious, rinse mouth thoroughly with water. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting unless directed to do so by a medical professional. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer more water.

Most important symptoms/effects, acute and delayed

Symptoms of exposure to the product include: Nausea, vomiting, diarrhoea, abdominal pain, skin rash, headache, drowsiness and convulsions.

Indication of any immediate medical attention and special treatment needed

Notes to physician: None

Specific treatments: Treat symptomatically and supportively.

SECTION 5: Firefighting Measures

Suitable (and unsuitable) extinguishing media	For small fires, use carbon dioxide, dry chemical, alcohol resistant foam, or water spray. Do not use water jets.
Specific hazards arising from the chemical including thermal decomposition products	Fires involving the product may produce irritating or poisonous vapours, mists, or other products of combustion.
Special protective equipment and precautions for fire-fighters	Firefighters must wear emergency equipment including positive pressure self-contained breathing apparatus with a full-face mask. Remove unaffected containers from fire area if possible.
Additional provisions	Act in accordance with the site's Internal Emergency Plan and the Workplace Specific Procedures for actions to be taken after an accident or other emergencies.

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Ventilate the area of the spill or leak, especially when in confined areas.

Do not touch or walk-through spilled material as slippery when spilt.

Contain spills if it can be done without risk and clean-up immediately.

Wear appropriate protective clothing recommended in Section 8 of the SDS.

Environmental Precautions

Prevent spillage or further leakage if safe to do so.

Do not allow the spilt product to enter water courses and drains and avoid contact with soil.

Do not allow the spilt product to spread to other areas - keep the spilt material contained and isolated.

Report spills and releases as required to appropriate authorities if the spilt product has caused environmental pollution (sewers, water ways, soil, or air).

Methods for cleaning up

For small spills, Sweep up with damp absorbent material. Place into a labelled waste container for subsequent reclamation or disposal. Keep the wash water out of drains, sewers and waterways.

For large spills,

Sweep up with absorbent material. Avoid creating dusty conditions and prevent wind dispersal and place the residues into a suitable container for proper disposal. Keep the wash water out of drains, sewers, and waterways

Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and Storage

Precautions for safe handling

Always provide good ventilation in the work area. Prevent contact with eyes, skin and clothing. Do not breathe in dust/vapours/spray mists. Wear protective clothing and equipment during handling as described in Section 8 of the SDS.

Do not eat or drink during use. Wash the hands and face thoroughly with soap after handling. Keep containers closed when not in use. Do not permit smoking in use or storage areas.

Locate emergency showers and eye-rinsing facility near the work/handling area. Maintain good normal industrial hygiene and housekeeping practices in areas where the product is used/handled.

Conditions for safe storage, including any incompatibilities

Always store locked up and keep containers tightly closed when not in use. Check storage containers regularly for leaks. The formulation is stable if stored well ventilated, out of direct sunlight, cool and free of moisture and high humidity. Keep out of reach of children, uninformed persons, and animals. Protect containers from physical damage and check the condition of storage containers periodically. Do not contaminate water, food, or feed by storage or disposal.

Avoid cross contamination with other agricultural products.

It is recommended to have appropriate spill control kits equipped with absorbent material in close proximity to storage areas (see Section 6).

Specific end use(s)

Use as directed. Use original container.

SECTION 8: Exposure Controls and Personal Protection

National occupational exposure limits- Restricted limits for hazardous chemical agents.

Component	Type	Control Parameter	Update	Basis
Not Applicable.	OEL-eight hour TWA	N/A	2021	South African RELs*
	OEL-STEL/C	N/A	2021	South African RELs*

- *REL: Recommended Exposure Limit.
- OEL-eight hour TWA: Occupational Exposure Limit- Time Weighted Average. Calculated over an eight-hour working day, for a five-day working week.
- OEL-STEL/C: Occupational Exposure Limit – short Term Exposure Limit /Ceiling Limit. Peak airborne concentration determined over the shortest analytically practicable period of time, which does not exceed 15 minutes.

National Biological Exposure Indices for (BEIs) for hazardous chemical agents.

Component	Sample Matrix	Sample Time	Value
Not Applicable.	-	-	-

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal Protective Equipment

Respiratory Protection:	Respiratory protection selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted and well-maintained particulate filter respirator, complying with an approved standard. Respirator selection and use should be based on contaminant type, form and concentration. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.
Skin and Hand Protection:	Select skin and hand protection based on the task being performed and the risks involved with the task. The gloves should be replaced immediately in case of damage or signs of wear. The personal protective clothing must be properly fitted and well maintained.
Eye/Face Protection:	Select safety eye/face protection based on the task being performed and the risks involved with the task. Wear tightly fitted and well-maintained safety eyewear compliant with an approved standard.
Hygiene Measures:	Wash the hands and/or face before breaks, eating, smoking or using the lavatory and at the end of the shift/working period. Eye wash fountains and safety showers should be available and easily accessible. Wash contaminated clothing before reuse.

Environmental exposure controls

In accordance with the local legislation for the protection of the environment it is recommended to avoid environmental spillage or releases of both the product and its container.

SECTION 9: Physical and Chemical Properties

Data applicable to mixture

Appearance	Appearance/physical state	Crystalline Solid
	Odour characteristics	
	Colour	White

Volatility	Boiling point (°C)	Not measured (Boric Acid 300°C)
	Vapour pressure (Pa)	Not measured
	Evaporation Rate at 20 °C	Not measured
Product Description	Relative density (kg/m ³ , relative density of water =1)	Powder, bulk density 1.44
	Solubility in water (g/100mL)	5g/100ml
	Decomposition temperature (°C)	Not measured (Boric Acid >300°C)
	Melting point/freezing point (°C)	Not measured (Boric Acid 171°C)
	pH	Powder
	Density/relative density (g/cm ³)	1.44
	Particle characteristics	Not measured
Flammability	Flammable (Y/N)	Not flammable
	Flash point (°C)	Not flammable
	Flammable limits-LEL	Not flammable
	Auto-ignition Temperature (°C)	Not flammable

Other Hazard Information

None Known.

SECTION 10: STABILITY AND REACTIVITY**Reactivity**

The product is stable under normal conditions of temperature and pressure.

Chemical Stability

Stable under normal ambient conditions of use, storage, and transport.

Possibility of Hazardous Reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

Conditions to Avoid

Avoid prolonged periods in direct sunlight

Incompatible Materials

Incompatible with: Not Applicable.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information**Information on likely routes of exposure****Toxicokinetics, metabolism and distribution:**

Non-human toxicological data: No Information available.

Method: No Information available.

Dosage: No Information available.

Routes of administration: No Information available.

Results: No Information available.

Absorption: No Information available.
Distribution: No Information available.
Metabolism: No Information available.
Excretion: No Information available.

Information on toxicological effects

Acute oral toxicity: No Information available
Acute dermal toxicity: No Information available.
Acute inhalation toxicity: No Information available.
Skin corrosion/irritation: Does not meet the GHS Classification criteria.
Serious eye damage/irritation: Does not meet the GHS Classification criteria.

Respiratory or skin sensitization: No Information available.
Germ cell mutagenicity: No Information available.
Carcinogenicity: No Information available.
Reproductive toxicity: Boric Acid.

Danger! According to the **harmonised classification and labelling** (ATP17) approved by the European Union, this substance may damage fertility and may damage the unborn child. **Additionally**, the classification provided by companies to ECHA in **REACH registrations** identifies that this substance may damage fertility or the unborn child.

Category 1B

STOT-single exposure: No Information available.
STOT-repeated exposure: No Information available.
Aspiration hazard: No Information available.

Symptoms related to the physical, chemical, and toxicological characteristics

Nausea. Vomiting. Diarrhoea. Abdominal pain. Skin rash. Headache. Drowsiness. Convulsions.

SECTION 12: Ecological Information

Ecotoxicity

Short-term (Acute) hazard Aquatic: Fatty Alcohol Ethoxylate.

Warning! According to the classification provided by companies to ECHA in REACH registrations this substance is very toxic to aquatic life and is harmful to aquatic life with long lasting effects.

Crustacea (Daphnia magna) - Acute EC₅₀ 0.53 mg/L for 48h
Fish - Acute LC₅₀ 1.2 mg/L for 96h
Algae and aquatic plants - Acute ErC₅₀ 0,976 mg/L for 72 or 96 h

Long-term (Chronic) hazard Aquatic: Does not meet the GHS Classification criteria.
Biodegradability in the aquatic environment: No information available.

Toxicity to other species.

Birds: No information available.
Bees: No information available.

Other Environmental and Adverse Effects:

Persistence and Degradability: Boric Acid
Biodegradation does not need to be tested because the substance is inorganic.

Bioaccumulative Potential: No information available

Mobility in Soil:

No information available.

Other Adverse Effects:

None Known

SECTION 13: Disposal Considerations

Waste handling and disposal

Dispose product related waste in accordance with all local regulations and prevent the contamination of water, food, or feed by storage or disposal of the waste.

General container handling

Empty all pesticides from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler. Do not use empty containers for any other purpose.

SECTION 14: Transport Information

	Land Transport (ADR/RID)	Inland Waterways (AND/ADNR)	See Transport (IMDG)	Air Transport (ICAO-TI/IATA-DGR)
UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN Proper Shipping Name	-	-	-	-
Transport Hazard Class	-	-	-	-
Transport Hazard Class Pictogram	-	-	-	-
Transport Subsidiary Class	-	-	-	-
Packaging Group	-	-	-	-
Environmental Hazard	-	-	-	-

Not classified as dangerous goods.

SECTION 15: Regulatory Information

Safety, health and environmental regulations/legislation for the mixture.

South Africa

Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. - Handling, labelling and Safety Data Sheets for hazardous and GHS classified substances and mixtures. Occupational Exposure Limits.

Hazardous Substances Act, 1973 (Act No.15 of 1973) - Requirements on the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of hazardous substances.

Occupational Health and Safety Act No. 85 of 1993.- Occupational Health and Safety Standards for employers and users working with and around hazardous chemical substances.

National Road Traffic Act, 1996 (ACT NO. 93 of 1996). - The identification and classification of dangerous goods for transport by road and rail modes.

Botswana

Pesticides and Toxic Substances Regulations. 1994 (2006) - Control and management of pesticides and other toxic substances.

Environmental and Pollution Control Act. 1990 - Hazardous waste disposal, hazardous substances, pesticides and effluent wastewater/discharge.

Namibia

Labour Act 11 of 2007 - Hazardous substances classification, labelling, Chemical Safety Data Sheets and Occupational Exposure Limits. Notification of the use of carcinogens and other controlled substances.

Regulations relating to the Health and Safety of Employees at Work Government Notice 156 of 1997. Labour Act 11 of 2007 schedule, item 2(2). - Occupational Health and Safety Standards for employers and users working with and around hazardous chemical substances.

SECTION 16: Other Information

Indication of changes

Alignment to the GHS.

Relevant classification and H-Statements:

Reproductive Toxicity - Category 1B.

H360: May damage fertility or the unborn child - Category 1B.

Hazardous to the Aquatic Environment, Acute Hazard – Category 3.

H402: Harmful to aquatic life

Key to Abbreviations

AND	European Provisions concerning the International Carriage of Dangerous Goods by inland Waterways
ADR	The European Agreement concerning the International Carriage of Dangerous Goods by Road
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
LD50	Lethal Dose 50
LC50	Lethal Concentration 50
RID	The Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
UN	United Nations

Notice to Reader

The information contained in this Safety Data Sheet relate only to the specific product and do not relate to the use of the product in combination with any other product or process.

Information in the SDS is supplied to the best of ROLFES AGRI (PTY) LTD's knowledge and

are believed to be current and correct as of the date on this SDS. All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

The SDS only provides information applicable to the health, safety, and environmental hazards of this product at the date of issue in order to facilitate the safe use, handling, storage and transport of this product and does not replace any product information or product specifications.

It is not possible for ROLFES AGRI (PTY) LTD to anticipate or control all conditions under which this product may be used, handled, stored or transported. The obligation of the user, receiver, handler or transporter remains to review the content of the SDS prior to potentially exposing persons/employees to the product and to consider any risks that may associated with the hazards of the product during use, handlings, storage or transportation. Appropriate health, safety and environmental protection risk mitigating measures must be in place and such information must be communicated to all persons that might be involved with and exposed to this product.

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