

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

SECTION 1. IDENTIFICATION OF MIXTURE/SUBSTANCE

1.1 PRODUCT IDENTIFIERS

Product Name: OptiGrove

Product Type: Foliar Applied Plant Nutrient

Product Description: Light Brown Liquid

1.2 DETAILS OF SUPPLIER OF SAFETY DATA SHEET

AgriLibrium (Pty) Ltd, Suite #120, Private Bag X1, Melkbosstrand, 7437, South Africa

1.3 RECOMMENDED AND RELEVANT USES

Identified Uses: Foliar applied macro- and micro-nutrient.

1.4 EMERGENCY CONTACT

Emergency Number: +27 861 555 777

SECTION 2. HAZARD IDENTIFICATION

2.1 CLASSIFICATION OF MIXTURE OR SUBSTANCE

Pictogram(s):  

Signal word: Danger

Hazard Statement(s):

H314	Causes serious eye damage
H360	May damage fertility or the unborn child

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

2.2 PRECAUTIONARY STATEMENTS

P102	Keep out of reach of children.
P203	Obtain, read and follow safety instructions before use
P264 + P265	Wash hands thoroughly after handling. Do not touch eyes.
P280	Wear protective gloves/ eye protection

P318	If exposed or concerned get medical advice
P302 + P361 + P354	If on skin: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes

2.3 OTHER HAZARDS

None

SECTION 3. COMPOSITION & INGREDIENT

3.1 PRODUCT DESCRIPTION AND SUBSTANCES

Chemical Name:	Potassium Hydroxide
CAS No.	1310-58-3
Formulation	5 - 10 %
Chemical Name:	Disodium Octaborate
CAS No.	12280-03-4
Formulation	<1 %

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

SECTION 4. FIRST-AID MEASURES

In the case of seeking medical attention, provide this safety data sheet to the physician in attendance.

4.1 DESCRIPTION OF NECESSARY FIRST-AID MEASURES

Following Ingestion: If product has been ingested, DO NOT induce vomiting unless instructed to so by a medical physician. Drink water and rinse mouth with water. Seek medical help if you continue to feel unwell.

Following Skin Contact: If skin irritation occurs, wash affected areas of skin with plenty of water for at least 15 minutes. Seek medical help if skin irritation persists.

Following Eye Contact: Cautiously wash eyes with plenty of water for at least 15 minutes. If eye irritation continues to occur seek medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING MEDIA

Dry powder or Carbon Dioxide

5.2 SPECIFIC HAZARDS

Combustion products may cause irritation.

5.3 SPECIAL PROTECTIVE ACTIONS

Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS

Protective Equipment: Ensure that protective nitrile gloves, safety goggles and safety boots are used for personal protection when cleaning spillages. Isolate area of spillage.

6.2 ENVIRONMENTAL PRECAUTIONS

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

No specific environmental precautions are needed. Refrain from allowing large quantities of product to enter sewer or drain.

SECTION 7. HANDLING & STORAGE

7.1 SAFE HANDLING PRECAUTIONS

Use product in agreement with regards to good industrial hygiene and safety. Do not eat, drink or smoke whilst handling or using the product. When handling product, wear suitable PPE (Personal Protective Equipment) such as nitrile gloves, safety goggles and safety shoes. Avoid ingestion of product as well as eye and skin contact as far as possible. Keep away from strong oxidising agents.

7.2 CONDITIONS FOR SAFE STORAGE

Keep out of reach of children and animals. Store in a cool, dry, well-ventilated are. Do not store together with strong oxidising agents.

SECTION 8. EXPOSURE CONTROLS

Occupational Exposure Limits: None

Biological Exposure Limits: None

8.1 APPROPRIATE ENGINEERING CONTROLS

Store in demarcated area and ensure that the product does not come into direct contact with other hazardous chemicals i.e., highly alkaline products. Ensure that caps of drums are tightly closed to avoid any spillages.

8.2 INDIVIDUAL PERSONAL PROTECTIVE EQUIPMENT (PPE)

Depending on application or handling of product, personal protective equipment (PPE) should be worn and used. Safety goggles should be worn when handling or decanting product to avoid splashing into eyes. Long overall clothing should be worn when handling product to avoid contact with skin. Impermeable gloves can be worn when handling product. Safety shoes should be worn when handling pallets or drums of product.

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

9.1 BASIC INFORMATION ON PHYSICAL AND CHEMICAL PROPERTIES

- a) **Appearance:** Light Brown Liquid
- b) **Odour:** Odourless
- c) **pH:** 5,6 ± 0.1 @ 25°C
- d) **Melting point/range (°C):** No information available
- e) **Boiling point/range (°C):** No information available
- f) **Flash point (°C):** Not applicable.
- g) **Evaporation rate:** No information available.
- h) **Flammability:** N/A
- i) **Ignition temperature (°C):** No information available.
- j) **Upper/lower flammability/explosive limits:** No information available.
- k) **Vapour pressure (25°C):** No information available.
- l) **Vapour density:** No information available.
- m) **Specific Gravity:** 1.16 ± 0.01
- n) **Water Solubility:** Water Dispersible
- o) **Viscosity:** No information available.
- p) **n-Octanol/Water partition coefficient:** No information available.
- q) **Auto-ignition temperature:** No information available.
- r) **Decomposition temperature:** No information available.
- s) **Explosive Properties:** No information available.
- t) **Oxidizing Properties:** No information available.

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

9.2 OTHER INFORMATION

No other Data Available

SECTION 10. STABILITY & REACTIVITY

10.1 REACTIVITY & CHEMICAL STABILITY

The product is stable and not reactive under correct and recommended storage conditions.

10.2 CONDITIONS TO AVOID

Contact with any incompatible materials.

10.3 INCOMPATIBLE MATERIALS

Calcium containing products.

10.4 HAZARDOUS DECOMPOSITION PRODUCTS

None

SECTION 11. TOXICOLOGICAL INFORMATION

Components	Concentration (%)	Dermal	Oral	Inhalation
Potassium Hydroxide	5 - 10	No data	No data	No data
Disodium Octaborate	<1	No data	No data	No data

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Oral Toxicity: Not classified.

Acute Dermal Toxicity: Not classified.

Acute Inhalation Toxicity: Not classified.

Chronic toxicity: Not classified.

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

Skin corrosion/irritation: Skin Corrosion 1A

Eye corrosion/irritation: Not classified.

Respiratory or skin sensitization: Not classified.

Germ cell mutagenicity: Not classified.

Carcinogenicity: Not classified

Reproductive toxicity: Category 1B

STOT-single exposure: Not classified.

STOT-repeated exposure: Not classified.

Aspiration hazard: Not classified.

11.2 ADDITIONAL INFORMATION

No additional information available

SECTION 12. ECOLOGICAL INFORMATION

12.1 TOXICITY

No information available

12.2 PERSISTENCE AND DEGRADABILITY

No information available

12.3 BIOACCUMULATIVE POTENTIAL

No information available

12.4 MOBILITY IN SOIL

No information available

12.5 RESULTS OF PBT & VPVB ASSESSMENT

No information available

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

First consider re-using or recycling of product before regarding as waste material. Disposal of product should be conducted to municipal, provincial and national law and regulations. National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008, R.634). When spillage of product occurs, dilute with large amounts of water and wash away.

SECTION 14. TRANSPORT INFORMATION

Transport
Pictogram:



	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN No.	Not regulated	Not regulated	Not regulated
UN Proper shipping name	Not regulated	Not regulated	Not regulated
Transport hazard class(es)	8	8	8
Packaging group	III	III	III
Marine pollutant	No	No	No

SECTION 15. REGULATORY INFORMATION

Occupational Health and Safety Act, 1993. Environmental Conservation Act 73 of 1989. National Water Act 36 of 1998. General Safety Regulations 1986. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 9, 2021. Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC

SECTION 16. OTHER INFORMATION

Safety Data Sheet: OptiGrove

According to UN GHS 9th Ed, SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

16.1 LEGISLATION RELATED TO SAFETY DATA SHEET

This safety data sheet has been designed in according to the standards of the International Organization for Standardization.

16.2 DISCLAIMER

Date of Issue: 03/01/2023

Validated by: Dr C. Malan & H. Korff on 28/05/2022

Notice to Reader:

The information and recommendations presented in this data sheet are to the best of our knowledge and belief accurate and reliable, but do not constitute a warranty. None of our representatives or agents are authorised to give any guarantee or warranty or make any representation in addition or contrary to the above, and we do not accept liability for claims of any kind for any loss, including, without limitation, consequential loss, injury or damage arising from the use of the information or recommendations, or of the products, which are subject matter hereof. The products are sold subject to our standard conditions of sale and tender, copies of which are available on request. This data is the sole property of AgriLibrium (Pty) Ltd and may not be duplicated, copied or reproduced in part or in its entirety unless agreed to in writing by AgriLibrium (Pty) Ltd.