PRINT DATE :

REVISION DATE : 24.04.12

VERSION : 1.0 / EN (New Zealand)





SAFETY DATA SHEET

according to ST/SG/AC.10/30/REV.10

FLOWER POWERTM

SECTION 1: Identification of the substance and of the company

1.1 Product identifier:

Substance

Substance name: FLOWER POWER™Other means of identification: Not applicable.Hazard components for labelling: Not applicable.

1.2 Relevant Identified use

Relevant identified uses: : Fertilizer

Uses advised against : Not for consumption.

1.3 Details of the supplier of the safety data sheet

Supplier

Name : Agri Technovation (Pty) Ltd

Address : Agri Business Park, 5 Louw Street,

Wellington Industrial Area

South Africa

7654

Telephone : (+27) 21 300 0543

(+64) 27 620 0567

E-Mail : info@agritechnovation.co.za

1.4 EMERGENCY TELEPHONE NUMBER

National Poisons and Hazardous Chemicals Information Centre

Dunedin Phone: 0800 POISON (0800 764-766)

24 hr Emergency Response: 0800 CHEMCALL (0800 243 622)

SECTION 2: Hazard identification

2.1 Classification of the substance

This product does not meet the criteria for classification in any hazard class according to ST/SG/AC.10/30/REV.10 on classification, labelling and packaging of substances and mixtures.

2.2 Label elements

Labelling according to ST/SG/AC.10/30/REV.10

Hazard pictograms

None

Signal word:

according to ST/SG/AC.10/30/REV.10

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Not applicable

Hazard statements:

Not applicable.

Precautionary statements:

Not applicable.

Supplemental Hazard information:

No supplementary hazard information. This product is not classified as a hazardous material according to the criteria set forth by ST/SG/AC.10/30/REV.10 for hazardous material.

Special rules for supplemental label elements for certain mixtures:

None known.

Additional labelling:

Keep out of reach of children.

2.3 Other hazard

None known.

SECTION 3: Composition/Information on ingredients

3.1 Substances

Not applicable.

3.2 Mixture

Description of the mixture:

Liquid blend of nitrogen, boron and molybdenum.

Hazardous ingredients

This mixture does not, within the current knowledge of the supplier, contain substances above their cut-off concentration limit fulfilling the criteria of hazard classes according to the ST/SG/AC.10/30/REV.10 regulation or present a health risk below the cut-off concentration limit. Substances that do not fall within classification criteria are not specified in this document to protect confidentiality.

SECTION 4: First aid measured

4.1 Description of first aid measures

General information

Take precautions to ensure your own safety when helping another person. Always wear appropriate personal protective equipment (see Section 8). If medical advice is needed, have Safety Data Sheet or product label at hand and provide treatment already administered.

Following inhalation

Get medical advice if you feel unwell.

Following skin contact

Rinse with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice.

Following eye contact

If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 5 minutes while holding eyelids open. If eye irritation persists: Get medical advice.

Following ingestion

If you feel unwell or if concerned: Get medical advice.

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Self-protection of the first aider:

No additional information.

4.2 Most important symptoms and effects, both acute and delayed.

No information available on this product.

4.3 Indication of any immediate medical attention and special treatment needed.

No information available on this product.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Mixture does not contain combustible substances, but there is no additional information about the combustion behaviour. Select fire and explosion prevention measures according to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

In the case of inclusion in an ambient fire hazardous substances can be released: Metal oxide fume, Boron oxide.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and special tightly sealed suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Protective equipment

Wear respiratory protection, eye protection, hand protection and body protection.

See section 8.2 of this SDS.

Emergency procedures

Evacuate all individuals. Warn surrounding areas. Isolate the area. Put protective measures in place. Only individuals with suitable personal protective equipment should be allowed into the affected area. Remove the source if safe to do so and provide adequate ventilation in closed spaces. Wash spill area.

6.2 Environmental precautions

Low hazard to water. Inform the responsible authorities when very large quantities get into water, drainage, sewer, or the ground.

6.3 Methods and material for containment and cleaning up

For containment

Use suitable closed, labelled containers for disposal in accordance with national and local regulations. The floor must not have a floor drain.

For cleaning up

Use suitable protective equipment while cleaning if necessary. See section 8.2 of this SDS. Wipe clean with cloth or paper towel. Tested industrial vacuum cleaner or suction device can be used as alternative. Use of blower for cleaning is not recommended.

6.4 Reference to other sections

See section 8.2 for information on personal protective.

See section 13 for disposal methods.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Heed advice on general occupational hygiene. Fill only into clearly marked containers. Label containers and pipelines clearly. Provide good ventilation in work areas. Used closed apparatus if possible. Washing facility at

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the workplace is required. Eye bath required. These locations must be sign posted. If release of the product can't be prevented, then it should be suctioned off at the point of exit.

Fire preventions

Substance is incombustible. Select firefighting measures according to the surrounding conditions.

Advice on general occupational hygiene

Take care to keep workplace clean and dry. Wear personal protective equipment. Avoid skin contact with product. Do not leave container open.

Wash skin with soap and water before breaks and at the end of work shifts and apply fatty skin-care products after washing. Foods, beverages, and other articles of consumption must not be consumed at the work areas. Suitable areas are to be designated for these purposes. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Transport in sealed containers above 4°C. Store in dry, ventilated place in tightly sealed container above 4°C.

Requirements for storage rooms and vessels

Do not use any food containers to prevent a mistake. Containers must be labelled clearly and permanently. Store in the original container as much as possible. Container should be locked up, away from children.

Packaging materials

Glass, PE, PP and PVC.

Materials to avoid

Pharmaceuticals, foods, and animal feeds including additives; Infectious, radioactive and explosive substances; Strongly oxidizing substances and most metals

7.3 Specific end uses

See section 1.2. No additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The mixture does not, within the current knowledge of the supplier, contain substances above their cut-off concentration limit fulfilling the criteria of hazard classes according to the ST/SG/AC.10/30/REV.10 regulation or present a health risk below the cut-off concentration limit. Substances that do not fall within classification criteria are not specified in this document to protect confidentiality.

8.2 Exposure controls

Appropriate engineering controls

All ventilation should be designed in accordance with OSHA standard. Use local exhaust at filling zones and where leakage and dust formation are probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below limits.

Components with occupational exposure limits

None

Personal protective equipment

Eye / Face protection

Wear glasses with side protection.

Skin protection

Hand protection

Suitable gloves type

The use of resistant protective gloves is recommended. Skin protection cremes do not protect as effectively against the substance as protective gloves. Wear duration with occasional contact (splash): 8 hours

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Be aware that the liquid may penetrate gloves. Frequent change is advisable.

Body protection

Wear an overall or a lab coat

Respiratory protection

In an emergency (e.g.: unintentional release of the substance) respiratory protection must be worn. Wear respiratory protection during operations where spraying or misting occurs.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid Colour : Transparent to light yellow

Odour : No data available. Odour threshold : No data available.

	Value
pH	7.6 - 8.0
Melting point/freezing	Not available.
point	
Initial boiling point/boiling	Not available.
range	
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not relevant.
Upper/lower flammability	Not relevant.
or explosive limits	
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.28 - 1.32
Solubility(ies)	100% soluble in water
Partition coefficient:	Not available.
n-octanol/water	
Auto-ignition temperature	Not relevant.
Decomposition temperature	Not relevant.
Viscosity	Not available.
Explosive properties	Not relevant.
Oxidizing properties	Not available.

9.2 Other information:

Acute effects:

No information on this product.

Chronic effects:

No information on this product.

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product.

10.2 Chemical stability

Stable under normal conditions.

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10.3 Possibility of hazardous reactions

Risk of explosion when in contact with acetic anhydride (heat).

10.4 Conditions to avoid:

None known.

10.5 Incompatible materials:

No information available on this product.

10.6 Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Main routes of exposure:

No data available for occupational handling.

Acute toxicity: Data for hazardous substances

The mixture does not, within the current knowledge of the supplier, contain substances above their cut-off concentration limit fulfilling the criteria of hazard classes according to the ST/SG/AC.10/30/REV.10 regulation or present a health risk below the cut-off concentration limit.

Other information

No other information.

Assessment Classification

Based on available data, the classification criteria according to ST/SG/AC.10/30/REV.10 are not met.

Hazard classification

Classification	Hazard Description
Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT – single exposure	Based on available data, the classification criteria are not met.
STOT – repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

Other information:

None known.

SECTION 12: Ecological information

12.1 Toxicity:

Aquatic toxicity

No information available on this product.

Assessment / Classification

Classification is not mandatory.

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12.2 Persistence and degradability

Not classifiable due to data lacking.

12.3 Bio accumulative potential

Not classifiable due to data lacking.

12.4 Mobility in soil

Not classifiable due to data lacking.

12.5 Results of Persistent, Bioaccumulating and Toxic and very Persistent and very Bioaccumulating assessment

Not classifiable due to data lacking.

12.6 Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

If there is no way of recycling it must be disposed of in compliance with the respective national and local regulations.

Collection of small amounts of product:

Do not put waste into sink or dust bin. Collect in container for toxic, inorganic residues and heavy metals salts and their solution. Adjust product to a pH of 6-8. Collection vessels must be clearly labelled with a systematic description of their contents. Store the vessels in a well-ventilated location. Entrust them to the appropriate authorities for disposal.

SECTION 14: Transport information

UN Number: Not applicable

UN Proper shipping name: Not applicable

Transport hazard class: Not regulated as a dangerous good. **Transport in bulk according to IMO instrument:** Not available.

DOT: Not regulated as a hazardous material by DOT.

IATA: Not regulated as a dangerous good. **IMDG:** Not regulated as a dangerous good.

Special precautions for user

None known.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS: ST/SG/AC.10/30/REV.10

15.2 Chemical Safety Assessment

No chemical safety assessment was completed for this product.

SECTION 16: Other information

16.1 Indication of changes

First version.

16.2 Abbreviations and acronyms

ATE Acute Toxicity Estimate

CAS Chemical Abstracts Service (division of the American Chemical Society)

DOT Department of transportation

according to ST/SG/AC.10/30/REV.10

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EC50 Half maximal effective concentration

GHS Globally Harmonised System

IATA International Airport Transport Association
IMDG International Maritime Dangerous Goods

LC50 Lethal concentration required to kill 50% of the population

STOT Specific target organ toxicity

16.3 Key literature references and sources for data

C&L Inventory - ECHA [WWW Document], n.d. URL https://echa.europa.eu/information-on-chemicals/clinventory-database (accessed 6.6.19).

GESTIS Substance database [WWW Document], n.d. URL http://gestis-en.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates\$fn=default.htm\$vid=gestiseng:sdbeng\$3.0 (accessed 6.6.19).

HAZARD COMMUNICATION: Hazard Classification Guidance for Manufacturers, Importers, and Employers, n.d.

16.4 Classification for mixtures and used evaluation method according to ST/SG/AC.10/30/REV.10

Classification based on calculation or concentration thresholds. See SECTION 2.1 (classification).

16.5 Relevant R-, H- and EUH-phrases (number and full text)

None

16.6 Training advice

Not relevant.

16.7 Further information

This SDS summarizes to the best of our knowledge at the date of issue, the chemical health and safety hazards of the product and general guidance on how to safely handle the material in the workplace.