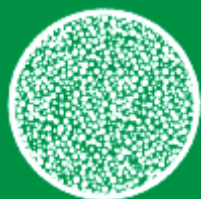


PRINT DATE :  
REVISION DATE : 24.11  
VERSION : 1.0 / EN (New Zealand)



# SAFETY DATA SHEET

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

## JUVENILE™

### SECTION 1: Identification of the substance and of the company

#### 1.1 Product identifier:

**Mixture**

**Mixture name** : JUVENILE™  
**Other means of identification** : Not applicable  
**Hazard components for labelling** : Urea Phosphate, Boric acid, Zinc Sulphate and Copper Sulphate

#### 1.2 Relevant Identified uses

**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

| Classification according to ST/SG/AC.10/30/REV.10      | Classification procedure          |
|--|-----------------------------------|
| Skin irritant, Category 2                              | Based on concentration threshold. |
| Reproductive toxicity, Category 1B                     | Based on concentration threshold. |
| Serious eye damage, Category 1                         | Based on concentration threshold. |
| Hazardous to the aquatic environment, Acute Category 2 | Based on concentration threshold. |

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Hazardous to the aquatic environment, Chronic  
Category 2

Based on concentration threshold.

## Additional information:

None

## 2.2 Label elements

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

#### Hazard pictograms



#### Signal word:

Danger

#### Hazard statements:

Causes skin irritation. Causes serious eye damage. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects.

#### Precautionary statements:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands thoroughly after handling. Wear protective gloves. IF ON SKIN: Wash with plenty water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. Wear protective gloves, protective clothing, eye protection and face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor. Avoid release to the environment. Collect spillage. IF exposed or concerned: Get medical advice or attention. Store locked up. Dispose of contents or container in accordance with national regulations.

#### Supplemental Hazard information:

No supplementary hazard information.

#### Special rules for supplemental label elements for certain mixtures:

Not applicable.

#### Additional labelling:

Keep out of reach of children.

## 2.3 Other hazard

None known.

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## SECTION 3: Composition/ Information on ingredients

### 3.1 Substances

Not applicable.

### 3.2 Mixture

#### Description of the mixture:

Dry blend of inorganic and organic powders containing nitrogen, phosphorus, potassium, zinc, boron and copper.

#### Hazardous ingredients

| Substance name  | CAS No.    | Concentration | Classification according to ST/SG/AC.10/30/REV.10        |
|-----------------|------------|---------------|--|
| Urea Phosphate  | 4861-19-2  | 0.00 - 2.00%  | Skin irritant, Category 2                                |
| Boric acid      | 10043-35-3 | 0.88 - 2.88%  | Reproductive toxicity, Category 1B                       |
| Zinc Sulphate   | 7733-02-0  | 3.00 – 7.00%  | Serious eye damage, Category 1                           |
|                 |            |               | Hazardous to the aquatic environment, Acute Category 2   |
|                 |            |               | Hazardous to the aquatic environment, Chronic Category 2 |
| Copper Sulphate | 7758-98-7  | 3.00 – 7.00%  | Serious eye damage, Category 1                           |
|                 |            |               | Hazardous to the aquatic environment, Acute Category 2   |
|                 |            |               | Hazardous to the aquatic environment, Chronic Category 2 |

**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 New Zealand Hazardous Chemical Regulations 2021; Regulation 14(b), not listed.

## 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 medical treatment already administered.

#### Following inhalation

IF exposed or concerned: Get medical advice/attention.

#### Following skin contact

Rinse with lukewarm, gently flowing water (and mild soap) for 10 to 20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice.

#### Following eye contact

Gently brush product off face. Do not rub eyes. Let the eyes water naturally for a few minutes. Look right and left, then up and down. If particle/dust does not come out, cautiously rinse eyes with lukewarm, gently flowing water for 5 to 10 minutes or until dust is removed, while holding eyelids open. If eye irritation

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persists: Get medical attention. Do not attempt to manually remove anything from the eyes. IF exposed or concerned: Get medical advice or attention.

## Following ingestion

If exposed or concerned: Get medical advice or attention.

## 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 the following hazardous substances can be released: Sulphur oxides, Metal oxide fumes and Boric 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. Pick up without creating dust. Afterwards ventilate area and wash spill area.

### 6.2 Environmental precautions

Severe hazard to waters. Avoid penetration into water, drainage, sewer, or the ground. Inform the responsible authorities about penetration of even small quantities.

### 6.3 Methods and material for containment and cleaning up

#### For containment

Use suitable closed, labelled containers for disposal in accordance to national and local regulations.

#### 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. The use of a blower for cleaning is not recommended. Avoid dust formation. Dust formation that cannot be avoided must be collected regularly. Use a tested industrial vacuum cleaner or suction device. Do not raise dust while cleaning. Use of a blower for cleaning is not permitted. Alternative: clean damp. Only conduct maintenance and other work on or in the vessel or closed spaces after obtaining written permission. Only work with vessels and lines after they have been thoroughly rinsed.

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## 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. Do not leave container open. Avoid rising dust. If release cannot be prevented, then it should be suctioned off at the point of exit. Provide good ventilation in work areas. Washing facility at the workplace is required. The locations must be sign posted.

#### Fire preventions

Fire equipment must be available.

Keep away from open flame. Do not smoke in working area. Do not weld in working area. Keep away from combustible materials.

#### Environmental precautions

Dispose in accordance with national and local regulations.

#### Advice on general occupational hygiene

Take care to keep workplace clean and dry. Wear personal protective equipment. Wash skin with soap and water before breaks and at the end of work 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

Store and transport in closed containers at room temperature.

#### Requirements for storage rooms and vessels

Do not use any food containers to prevent a mistake. Containers must be labelled clearly and permanently. Keep container tightly closed in a dry and well-ventilated place. Avoid contamination with other materials.

#### Packaging materials

Glass, PE, PP and PVC.

#### Materials to avoid

Pharmaceuticals, foods, and animal feeds including additives; Infectious, radioactive, and explosive substances; Flammable liquids; Explosive substances; Strongly oxidizing substances; Ammonium nitrate and preparations containing ammonium nitrate; Organic peroxides and self-reactive substances.

### 7.3 Specific end uses

See section 1.2. No additional information.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

This mixture does not, within the current knowledge of the supplier, contain further substances other than those listed, 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.

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## 8.2 Exposure controls

### Appropriate engineering controls

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 TLV & PEL limits.

### Components with occupational exposure limits

Boric acid, zinc sulphate

### Personal protective equipment

#### Eye / Face protection

Wear glasses with side protection.

#### Skin protection

Hand protection

The use of resistant protective gloves is recommended. Skin protection cremes do not protect as effectively against the substance as protective gloves. In case of doubt contact the gloves' manufacturer.

Wear duration with occasional contact (splash): 8 hours

Be aware that liquids 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 : Powder

Colour : Light blue

Odour : No specific odour.

Odour threshold : No data available.

|  | Value                 | Method | Temperature | Pressure | Remark |
|--|-----------------------|--------|-------------|----------|--------|
| pH (5% solution)                             | 2.8 - 3.0             |        |             |          |        |
| Melting point/freezing point                 | Not available.        |        |             |          |        |
| Initial boiling point/boiling range          | Not relevant.         |        |             |          |        |
| Flash point                                  | Not available.        |        |             |          |        |
| Evaporation rate                             | Not available.        |        |             |          |        |
| Flammability (solid, gas)                    | Not available.        |        |             |          |        |
| Upper/lower flammability or explosive limits | Not relevant.         |        |             |          |        |
| Vapor pressure                               | Not relevant.         |        |             |          |        |
| Vapor density                                | Not available.        |        |             |          |        |
| Relative density                             | Not available.        |        |             |          |        |
| Solubility(ies)                              | 10 g per 100 ml water |        |             |          |        |
| Partition coefficient: n-octanol/water       | Not available.        |        |             |          |        |

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|                                  |                |
|----------------------------------|----------------|
| <b>Auto-ignition temperature</b> | Not available. |
| <b>Decomposition temperature</b> | 130°C          |
| <b>Viscosity</b>                 | Not available. |
| <b>Explosive properties</b>      | Not relevant.  |
| <b>Oxidizing properties</b>      | Not available. |

## 9.2 Other information:

None.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

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

### 10.2 Chemical stability

None known.

### 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:

None known.

### 10.6 Hazardous decomposition products:

May include: zinc oxide and boron trioxide.

## 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 and the classification criteria of ST/SG/AC.10/30/REV.10, the mixture can be classified as Skin irritant, Category 2.   |
| Serious eye damage/irritation | Based on available data and classification criteria of ST/SG/AC.10/30/REV.10, the mixture can be classified as a Serious eye damage, Category 1 |

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|                           |  |
|---------------------------|--|
| 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 and classification criteria of ST/SG/AC.10/30/REV.10, the mixture can be classified as a Reproductive toxicity, Category 1B. |
| 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         | Not classifiable due to data lacking.  |

## Other information:

### Main toxic effects

Acute effects:

No information on the product.

Chronic effects:

No information on the product.

## SECTION 12: Ecological information

### 12.1 Toxicity:

#### Aquatic toxicity

Acute (short-term) toxicity to fish

| Substance       | Effect dose/ - concentration | Value     | Test duration |
|-----------------|------------------------------|-----------|---------------|
| Copper Sulphate | LC50                         | 0.31 mg/l | 96 hours      |
| Zinc Sulphate   | LC50                         | 4 mg/l    | 96 hours      |

Acute (short-term) toxicity to crustacea

| Substance       | Effect dose/ - concentration | Value     | Test duration |
|-----------------|------------------------------|-----------|---------------|
| Copper Sulphate | EC50                         | 0.06 mg/l | 48 hours      |
| Zinc Sulphate   | EC50                         | 0.79 mg/l | 48 hours      |

#### Assessment / Classification

Based on the ecological aquatic toxicity data and classification criteria in ST/SG/AC.10/30/REV.10, the mixture can be classified as Hazardous to the aquatic environment, Acute and Chronic Category 2.

### 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.



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## 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. 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.

**Packaging group:** Not regulated as a dangerous good.

**Environmental hazards:** 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 revision

### 16.2 Abbreviations and acronyms

|      |  |
|------|--|
| ATE  | Acute Toxicity Estimate  |
| CAS  | Chemical Abstracts Service (division of the American Chemical Society) |
| DoT  | Department of Transportation   |
| EC50 | Half maximal effective concentration                                   |
| GHS  | Globally Harmonised System   |
| IATA | International Airport Transport Association                            |

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IMDG International Maritime Dangerous Goods

LC50 Lethal concentration required to kill 50% of the population

## 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> (accessed 9.7.24).

GESTIS Substance database [WWW Document], n.d. URL <https://gestis-database.dguv.de/> (accessed 9.7.24).

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 H-phrases (number and full text)

None

## 16.6 Training advice

Not relevant.

## 16.7 Further information

This safety data sheet 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.