

SAFETY DATA SHEET

| | |
|-------------------|--|
| Section 1. | Identification of the material and the supplier |
|-------------------|--|

Product: **Blaukorn Suprem 21+5+10**
 Item Code:
 Product Use: Fertiliser
 Restriction of Use: Refer to Section 15

New Zealand Supplier: HortFertplus
 Address: 18 Cabernet Crescent
 Westgate, Auckland 0614
 Telephone: +64 9 478 5585

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 3 March 2017

| | |
|-------------------|-------------------------------|
| Section 2. | Hazards Identification |
|-------------------|-------------------------------|

This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

EPA Approval No: Fertilisers (subsidiary) – HSR002571

Pictograms



Irritant



Chronic

Signal Word: Warning

| HSNO Classification | Hazard Code | Hazard Statement | GHS Category |
|---------------------|-------------|---|--------------|
| 6.1E (oral) | H303 | May be harmful if swallowed. | Category 5 |
| 6.4A | H319 | Causes serious eye irritation. | Category 2A |
| 6.8B | H361 | Suspected of damaging fertility or the unborn child | Category 2 |
| 9.1D | H401 | Toxic to aquatic life. | Category 4 |

| Prevention Code | Prevention Statement |
|-----------------|---|
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |

| | |
|------|--|
| P280 | Wear protective clothing. |
| P281 | Use personal protective equipment as required. |

| Response Code | Response Statement |
|------------------|--|
| P101 | If medical advice is needed, have product container or label at hand. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P305 + P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |

| Storage Code | Storage Statement |
|--------------|-------------------|
| P405 | Store locked up. |

| Disposal Code | Disposal Statement |
|---------------|--|
| P501 | Dispose of according to Local Regulations or Authorities |

Section 3. Composition / Information on Ingredients

| Ingredients | Wt% | CAS NUMBER. |
|-----------------------------------|-----------|-------------|
| ammonium nitrate | ≥45 - <70 | 6484-52-2 |
| disodium tetraborate pentahydrate | ≤0.2 | 12179-04-3 |

Section 4. First Aid Measures

Routes of Exposure:

| | |
|--------------|--|
| If in Eyes | Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice. |
| If on Skin | Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. |
| If Swallowed | Clean mouth with water and drink afterwards plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell. |
| If Inhaled | Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult. |

Section 5. Fire Fighting Measures

| | |
|---|--|
| Hazard Type | Non-combustible substance with oxidizing ingredient |
| Hazards from combustion products | Thermal decomposition can lead to release of irritating gases and vapours. Nitrogen oxides (NO _x) and ammonia. |
| Suitable Extinguishing media | Water Not suitable: Foam, Dry chemical, Carbon dioxide (CO ₂) and Sand |
| Precautions for firefighters and special protective clothing | Self-contained breathing apparatus. |
| HAZCHEM CODE | 12 |

Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel.

Use mechanical handling equipment for cleanup.

Do not empty into drains. Retain and dispose of contaminated wash water.

Section 7. Handling and Storage

Precautions for Handling:

- Keep out of reach of children.
- Read label before use.
- Do not handle until all safety precautions have been read and understood.
- Wash hands thoroughly after handling.
- Avoid release to the environment.
- Wear protective clothing.
- Use personal protective equipment as required.
- Keep away from direct sunlight.
- Keep away from heat.
- Protect from contamination.
- Protect from moisture.

Precautions for Storage:

- Do not store together with oxidizing and self-igniting products.
- Keep away from direct sunlight.
- Protect from contamination.
- Protect from moisture.
- When stored loose do not mix with other fertilizers.
- Keep in a dry place.
- Store locked up.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| Substance | TWA | | STEL | |
|-----------|-----|-------------------|------|-------------------|
| | ppm | mg/m ³ | ppm | mg/m ³ |

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

Engineering Controls

Ensure adequate ventilation is available

Personal Protection

| | |
|-----------------------|---|
| Eyes | Wear goggles with side shields. Avoid wearing contact lenses. |
| Hands and Skin | Wear gloves. |
| Respiratory | Breathing apparatus only if aerosol or dust is formed. Respirator with a particle filter (EN 143) - P1 filter |

Section 9 Physical and Chemical Properties

| | |
|---|--|
| Appearance | Various colours - Solid |
| Odour | Odourless |
| Odour Threshold | Not available |
| pH | ca. 5, Concentration: 100 g/l (20 °C) |
| Boiling Point | Not available |
| Melting Point | Not available |
| Freezing Point | Not available |
| Flash Point | Not available |
| Flammability | The product is not flammable. |
| Upper and Lower Explosive Limits | Not available |
| Vapour Pressure | Not available |
| Vapour Density | Not available |
| Bulk Density | ca. 1.150 kg/m ³ |
| Solubilities | Soluble |
| Partition Coefficient: | Not available |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | > 130 °C To avoid thermal decomposition, do not overheat. |
| Kinematic Viscosity | Not available |
| Particle Characteristics | Not applicable |

Section 10. Stability and Reactivity

| | |
|---|---|
| Stability of Substance | This product is stable under normal conditions. |
| Conditions to Avoid | Keep away from heat and sources of ignition. |
| Incompatible Materials | Sulphur, chlorites, chloride, chlorates, Hypochlorites, acid or alkaline reacting substances, flammable oxidizable substances, nitrites, metallic salts, metallic powder, herbicide, chlorinated hydrocarbons, organic compounds. |
| Hazardous Decomposition Products | Nitrogen oxides (NOx) and ammonia |

Section 11 Toxicological Information**Acute Effects:**

| | |
|-------------------|---|
| Swallowed | May be harmful if swallowed. Product= LD50 (Rat) = >2000mg/kg |
| Dermal | Not applicable. |
| Inhalation | Not applicable. |
| Eye | Causes severe irritation to eyes |
| Skin | Not applicable. |

Chronic Effects:

| | |
|-------------------------------|--|
| Carcinogenicity | Not applicable. |
| Reproductive Toxicity | Suspected of damaging fertility or the unborn child. |
| Germ Cell Mutagenicity | Not applicable. |
| Aspiration | Not applicable. |
| STOT/SE | Not applicable. |
| STOT/RE | Not applicable. |

Components:**ammonium nitrate:**

Acute oral toxicity : LD50 (Rat): > 2.950 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : > 88,8 mg/l
Method: No information available.

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 402

disodium tetraborate pentahydrate:

Acute oral toxicity : LD50 (Rat): 3.200 - 3.400 mg/kg
Method: No information available

Acute inhalation toxicity : LC50 (Rat): > 2,0 mg/l
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Method: No information available

Section 12. Ecotoxicological Information

HSNO Classes: 9.1D = Toxic to aquatic life.

Components:

ammonium nitrate:

Toxicity to fish : LC50 (Fish): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 490 mg/l
Exposure time: 48 h

LC50 : 490 mg/l

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 1.700 mg/l
Exposure time: 10 d

disodium tetraborate pentahydrate:

Toxicity to fish : LC50 (Fish): 74 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 242 mg/l
Exposure time: 24 h

Toxicity to algae : EC10 (Scenedesmus subspicatus): 24 mg/l
Exposure time: 96 h

| | |
|--------------------------------------|--|
| Persistence and degradability | No data available |
| Bioaccumulation | Bioaccumulation is unlikely. |
| Mobility in Soil | Groundwater contamination is unlikely. |
| Other adverse effects | No data available |

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method: Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.
Ensure waste container holding any unwanted product or contaminated spill media is labelled "Hazardous Waste"

Precautions: depositing the substance in a landfill provided the landfill is managed to ensure that—

- (i) the substance will not at any time come into contact with an explosive or flammable substance (equivalent to HSNO class 1, 2, 3 or 4); and
- (ii) there is no ignition source in the vicinity of the disposal site that is capable of igniting the substance; and
- (iii) if the substance were to combust, or cause or contribute to combustion, no person or place where a person may legally be, would be exposed to more blast overpressure or heat radiation than that described in regulation 7(3)(b) of the Hazardous Substances (Disposal) Regulations 2001; and
- (iv) the concentration of the substance in any discharge from the landfill does not, after reasonable mixing, exceed any relevant tolerable exposure limit and/or environmental exposure limit set for the substance or any of its component(s).

Disposal methods to avoid: Do not allow to enter waterways

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Road and Rail Transport

UN No: 2071
 Class-primary 9
 Packing Group III
 Proper Shipping Name: AMMONIUM NITRATE BASED FERTILIZER

Air Transport

UN No: 2071
 Class-primary 9
 Packing Group III
 Proper Shipping Name: AMMONIUM NITRATE BASED FERTILIZER

Marine Transport

UN No: 2071
 Class-primary 9
 Packing Group III
 Proper Shipping Name: AMMONIUM NITRATE BASED FERTILIZER

Section 15 Regulatory Information

EPA Approval Code: Fertilisers (Subsidiary Hazard) – HSR002571

HSNO Classification: 6.1E (oral), 6.4A, 6.8B, 9.1D

HSNO Controls:

Trigger quantities:

| | Trigger Quantity |
|-----------------------------|-------------------------|
| Approved Handler | Not required |
| Location Certificate | Not required |
| Tracking Trigger Quantities | Not required |
| Signage Trigger Quantities | 10000kg |
| Emergency Response Plan | 10000kg |
| Secondary Containment | 10000kg |
| Restriction of Use | None |

Section 16 Other Information

Glossary

EC₅₀ Median effective concentration.

| | |
|------------------|---|
| EEL | Environmental Exposure Limit. |
| EPA | Environmental Protection Authority |
| HSNO | Hazardous Substances and New Organisms. |
| LC ₅₀ | Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it. |
| LD ₅₀ | Lethal dose to kill 50% of test animals/organisms. |
| LEL | Lower explosive level. |
| OSHA | American Occupational Safety and Health Administration. |
| TEL | Tolerable Exposure Limit. |
| TLV | Threshold Limit Value-an exposure limit set by responsible authority. |
| UEL | Upper Explosive Level |
| WES | Workplace Exposure Limit |

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

Disclaimer

This document has been issued by TCC (NZ) Ltd and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the New Zealand distributor, if further information is required.

Issue Date: 3 March 2017 Review Date: 3 March 2022