

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Floranid Club**
 Item Code: 000000001339704899
 Product Use: Fertiliser
 Restriction of Use: Refer to Section 15

New Zealand Supplier: HortFertplus
 Address: 7C Vega Place
 Rosedale, Auckland, 0632
 Telephone: +64 9 478 5585
 Fax Number: +64 9 478 5586

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 4 May 2017

Section 2. Hazards Identification

This substance is NOT hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Ammonium Nitrate	>1 - <10	6484-52-2
N,N''-(isobutylidene) Diurea	>10 - <45	6104-30-9

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes: Rinse cautiously with water for 15 minutes. 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. In case of lung irritation, first treatment with dexametason aerosol (spray).

Section 5. Fire Fighting Measures

Hazard Type	Non-hazardous substance with oxidizing ingredient
Hazards from combustion products	Can decompose at above 100 °C. Thermal decomposition products: Nitrogen monoxide, nitrogen dioxide, dinitrogen oxide, ammonia Isobutylaldehyde
Suitable Extinguishing media	Water Unsuitable: Foam, Dry chemical, Carbon dioxide (CO ₂), Sand
Precautions for firefighters and special protective clothing	Self-contained breathing apparatus. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
HAZCHEM CODE	None Allocated

Section 6. Accidental Release Measures

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

For cleanup use mechanical handling equipment.

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

Section 7. Handling and Storage**Precautions for Handling:**

- Read label before use.
- Wear protective clothing.
- Keep away from direct sunlight.
- Keep away from heat.
- Protect from contamination.
- Protect from moisture.

Precautions for Storage:

- Store away from combustible materials.
- When stored loose do not mix with other fertilizers.
- Store well areas and containers away from other substances.
- Protect from moisture.
- Keep in a dry place.

Section 8 Exposure Controls / Personal Protection**Occupational Exposure Limits**

Contains no substances with occupational exposure limit values.

Substance name	End Use	Exposure routes	Potential health effects	Value
ammonium nitrate	Workers	Inhalation	Specific effects	37,6 mg/m ³
Remarks:	Exposure time: 1 d			
	Workers	Skin contact	Specific effects	21,3 mg/kg
Remarks:	Exposure time: 1 d			
	Consumers	Ingestion	Specific effects	12,8 mg/kg
Remarks:	Exposure time: 1 d			
	Consumers	Ingestion	Specific effects	12,8 mg/kg
Remarks:	Exposure time: 1 d			

	Consumers	Inhalation	Specific effects	11,1 mg/m ³
Remarks:	Exposure time: 1 d			
N,N''-(isobutylidene)diurea	Workers	Skin contact	systemic effects	37,5 mg/m ³
Remarks:	Continuous exposure			
	Workers	Inhalation	systemic effects	66,12 mg/m ³
Remarks:	Continuous exposure			
	Consumers	Skin contact	systemic effects	18,75 mg/m ³
Remarks:	Continuous exposure			
	Consumers	Inhalation	systemic effects	16,31 mg/m ³
Remarks:	Continuous exposure			
	Consumers	Ingestion	systemic effects	9,375 mg/m ³
Remarks:	Continuous exposure			

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
ammonium nitrate	Fresh water	0,45 mg/l
	Marine water	0,045 mg/l
	Ceiling Limit Value	4,5 mg/l
N,N''-(isobutylidene)diurea	Fresh water	0,5 mg/l
	Marine water	0,05 mg/l
	Fresh water sediment	1,76 mg/l
	Marine sediment	0,176 mg/l
	Soil	10,7 mg/l
	Behaviour in waste water treatment plants	640 mg/l

Engineering Controls

No specific controls are needed.

Personal Protection

Eyes	In case of dust formation: Safety glasses with side shields.
Hands and Skin	Normal clean work clothing and rubber 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	Granular – various colours
Odour	Odourless
Odour Threshold	Not available
pH	ca. 6.2, Concentration: 100 g/l (20 °C)
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	None

Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	Not available
Bulk Density	ca. 860 kg/m ³
Solubilities	Soluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	>100 ^o C To avoid thermal decomposition, do not overheat.
Kinematic Viscosity	Not available
Particle Size	Not available

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	oxidizable substances Strong acids and strong bases
Hazardous Decomposition Products	No decomposition if stored and applied as directed. Decomposes on heating.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Not applicable.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Toxicity

Product:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: Directive 84/449/EEC, C.2

Toxicity to algae : EC50 (Scenedesmus subspicatus): > 100 mg/l
Exposure time: 72 h
Method: DIN 38412

Toxicity to bacteria : EC0 (Pseudomonas putida): ca. 640 mg/l
Exposure time: 16 h
Test Type: activated sludge
Method: No data available

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

N,N"-(isobutylidene)diurea:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): ca. 500 mg/l
Exposure time: 48 h
Method: Directive 84/449/EEC, C.2

Toxicity to algae : EC50 (Scenedesmus subspicatus): > 500 mg/l
Exposure time: 72 h
Method: DIN 38412

Toxicity to bacteria : EC0 (Pseudomonas putida): ca. 640 mg/l

Persistence and degradability	No data available.
Bioaccumulation	Bioaccumulation is unlikely.
Mobility in Soil	No data available.
Other adverse effects	Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. There is a high probability that the product is acute not harmful to aquatic organisms.

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method: Triple rinse and dispose according to Local Regulations.

Precautions and methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

This substance is NOT hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

Glossary

EC ₅₀	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: 4 May 2017 Review Date: 4 May 2022