

Clarity

Section 1: Identification of the Substance or Mixture and of the Supplier

Product name:	Clarity
Recommended use:	Biological control agent and bio-fertiliser.
Company details:	Grochem (AgriNova New Zealand Limited) 15 Sunlight Grove Porirua New Zealand
Telephone:	+64 4 237 0905
Email:	grochem@grochem.com
Emergency telephone:	New Zealand 0800 CHEMCALL – 24 hours (0800 243 6225) Australia 1800 127 406 Other locations +64 4 917 9888 or The National Poisons Centre 0800 POISON (0800 764 766)
Date of preparation:	08 August 2014

Section 2: Hazards Identification

Hazard classification:	
Dangerous Goods (Transport)	Not a Dangerous Good under the Land Transport Rule: Dangerous Goods 2005.
Hazardous substances (HSNO):	9.1D (ECOTOXIC – Biocidal. Clarity is a low hazard fungicide, use in a controlled manner). Potential sensitiser.

Section 3: Composition/Information on Ingredients

Classification & type:	CAS No.	Proportion (%w)
Material		
Bacillus Subtilis	-	171.4g/kg
Non-Hazardous components	-	to 100%

Section 4: First Aid Measures

Symptoms of exposure:	No adverse health effects expected if the product is handled in accordance with this SDS and the product label. Symptoms that may arise if the product is mishandled are:
Symptoms and effects:	No typical symptoms and effects known.
First aid actions:	In all cases of doubt, or when symptoms persist, seek medical attention.
If Swallowed	Rinse mouth with water. For advice, contact the National Poisons Centre 0800 POISON (0800 764766).
If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
If on Skin	Wash skin with soap and water. Remove and wash contaminated clothing. If skin irritation occurs, get medical advice.
If Inhaled	Move to clean air, and make comfortable in a position making breathing easy. Seek medical advice after significant exposure.
Workplace facilities:	Eyewash facilities should be available.
Notes for medical personnel:	Treat symptomatically.

Section 5: Fire Fighting Measures

Type of Hazard:	Combustible.
HAZCHEM code:	N/A
Combustion products:	Burning may evolve noxious fumes which may include carbon monoxide, carbon dioxide, nitrous oxides, or other toxic compounds
Extinguishing media & methods:	Water fog, foam, alcohol foam, CO ₂ , dry chemical. DO NOT use water jet. Cool closed containers with water. Contain effluent and prevent entry into drains and waterways.
Recommended protective clothing:	Firefighters should wear full protective clothing and self-contained breathing apparatus.

Section 6: Accidental Release Measures

Personal protection:	See Section 8.3 for appropriate PPE.
Containment and clean up:	Contain and collect spillage. Prevent entry to waterways and drains. Reuse or dispose of collected material at an approved landfill.
Special requirements:	See Section 13 for instructions for the disposal of waste/contaminated material.

Section 7: Handling and Storage

Subsection 1:	Handling
Handling practices	Wear appropriate PPE as detailed in Section 8.3. Clarity and seeds treated with Clarity shall not be applied directly onto or into water.
Subsection 2:	Storage
Site requirements	Store between 5-25degC. Avoid generating dusts.
Packaging	Store product in the closed, original container.

Section 8: Exposure Controls/Personal Protection

Subsection 1: Workplace Exposure Guidelines (may also be considered in section 2)

Workplace exposure standards No exposure standards have been set for this substance.

Exposure Standards outside the workplace
None set

Subsection 2: Engineering Controls

Exposure control measures Use in a well ventilated area. Wear appropriate PPE and avoid contact.

Subsection 3: Personal Protective Equipment (PPE)

Detail specifications for equipment Wear safety glasses, waterproof gloves, a long sleeved shirt, long pants and shoes worn with socks.

In addition, a dust/mist-filtering mask must be worn when opening Clarity packaging, treating seeds or spraying with Clarity, opening bags of seeds treated with Clarity and/or filling seed sowing machines with seeds treated using Clarity.

Use good personal hygiene.

Wash hands after handling.

Section 9: Physical and Chemical Properties

Not available	Beige/white powder	pH	N/A
Odour	Musty	Boiling point (degC)	N/A
Specific gravity (kg/L)	N/A	Freezing point (degC)	N/A
Solubility	Disperses	Flashpoint (degC)	N/A

Section 10: Stability and Reactivity

Stability of substance: Stable under normal conditions. Risk of decomposition and polymerisation at higher temperatures.

Conditions to avoid: High temperature – biological organisms degrade at >50degC.

Material to avoid: Avoid contact with biocides and antimicrobial compounds.

Hazardous decomposition products: Unknown.

Hazardous polymerization: Not known to occur.

Section 11: Toxicological Information

Data and interpretation: Unknown.
See Section 2 for general hazard information.

Section 12: Ecological Information

Potential Environmental Interactions: No EELs are set for Clarity at this time.

Section 13: Disposal Considerations

Product disposal: Use as directed on the label or at dispose of at an approved facility.

Container disposal Recycle or bury at an approved landfill.

Section 14: Transport Information

UN Number: N/A

DG Class and Subsidiary Group: N/A

Proper shipping name: N/A

Packing group: N/A

HAZCHEM code: N/A

Special precautions: None.

Section 15: Regulatory Information

Regulatory status: Registered Pursuant to the ACVM Act 1997 P7957. See www.foodsafety.govt.nz for registration conditions.
Approved Pursuant to the HSNO Act 1996 HSR008016. See www.epa.govt.nz for approval conditions.

HSNO Controls: Trigger quantities for this substance:
SDS must be available for: 1kg
Signage: 10,000kg
Emergency plan: 10,000kg

Section 16: Other Information

Revision due: 08 August 2019

Additional information: Directions for use are found on the product label.

Glossary:

ACVM	Agricultural Compounds and Veterinary Medicines (in relation to Group or Act 1997)
CAS	Chemical Abstract Services Number, used to uniquely identify chemical compounds.
EEL	Environmental Exposure Limit.
HSNO	Hazardous Substances and New Organisms (legislation 1996).
LD50	Lethal Dose fatal to 50% of test animals/organisms.
PPE	Personal Protective Equipment.

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Grochem, it is the user's responsibility to determine conditions of safe use of the product.