

## Encal™

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

<b>Product name</b>	Encal
<b>Recommended use</b>	Liquid Fertiliser
<b>Company details</b>	Grochem (AgriNova New Zealand Limited) 15 Sunlight Grove Porirua New Zealand
<b>Telephone</b>	+64 4 237 0905
<b>Email</b>	grochem@grochem.com
<b>Emergency telephone</b>	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)
<b>Date of preparation</b>	17 January 2018

### Section 2: Hazards Identification

<b>Hazard classification (Transport):</b>	Not a dangerous good for transport.
<b>Hazardous substances (HSNO):</b>	6.1D (WARNING: Harmful if swallowed) 6.3B (WARNING: Causes mild skin irritation) 6.4A (WARNING: Causes serious eye irritation) 6.8B (DANGER: Suspected of damaging fertility or the unborn child) 9.3B (Toxic to terrestrial vertebrates)



<b>Precautionary statement(s)</b>	P101 If medical advice is needed have product container or label at hand P102 Keep out of reach of children P201 Obtain special instructions before use P202 Do not handle until all safety instructions have been read and understood P264 Wash thoroughly after handling P270 Do not eat, drink or smoke when using this product P280 Wear protective gloves, eye/face protection and protective clothing P281 Use personal protective equipment as required P312 Call a POISON CENTRE or doctor/physician if you feel unwell P391 Collect spillage P405 Store locked up P501 Dispose of contents/container in accordance with relevant regulations
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### Section 3: Composition/Information on Ingredients

#### Classification & type:

Material	CAS No.	Proportion (%w)
Boric Acid	10043-35-3	0.3
Calcium Nitrate	13477-34-4	<65
Non-Hazardous components		to 100%

### Section 4: First Aid Measures

<b>First aid actions:</b>	If exposed, concerned or if symptoms persist, get medical advice/attention. If medical advice is needed, have product container or label at hand.
If Swallowed	Rinse mouth. Call a POISON CENTRE or doctor/physician if you feel unwell.
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 advice/ attention
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention
If Inhaled	Remove to fresh air and keep at rest in a position comfortable for breathing.
<b>Workplace facilities:</b>	Eyewash and safety shower
<b>Notes for medical personnel:</b>	Treat symptomatically.

### Section 5: Fire Fighting Measures

<b>Type of hazard</b>	Contains oxidising material may intensify fire when dried to crystal.
<b>HAZCHEM code:</b>	N/A
<b>Combustion products:</b>	Not known, include nitrogen, carbon and various metal oxides.
<b>Extinguishing media &amp; methods:</b>	Keep container cool. Use methods appropriate to combustible material involved. Waste water should be contained and collected.
<b>Recommended protective clothing:</b>	Fire fighters to wear self-contained breathing apparatus.

### Section 6: Accidental Release Measures

<b>Personal protection</b>	See Section 8.3 for appropriate PPE.
<b>Containment and clean up:</b>	Contain and collect spillage. Dispose of contaminated material at an approved landfill or use as prescribed on the label.
<b>Special requirements:</b>	See Section 13 for instructions for the disposal of waste/contaminated material.

### Section 7: Handling and Storage

<b>Subsection 1</b>	<b>Handling</b>
Handling practices	Wear appropriate PPE as detailed in Section 8.3. Do not handle until all safety precautions have been read and understood. Do not breathe mist or spray. Keep out of reach of children. Read label before use.
<b>Subsection 2</b>	<b>Storage</b>
Site requirements	Store locked up in a cool dry place away from foodstuffs.

## Section 8: Exposure Controls/Personal Protection

<b>Subsection 1:</b>	<b>Workplace Exposure Guidelines (may also be considered in section 2)</b>
Workplace exposure standards	No exposure standards have been set for this substance.
<b>Subsection 2:</b>	<b>Engineering Controls</b>
Exposure control measures	Use only outdoors or in a well-ventilated area. Avoid inhaling spray. Use with local exhaust ventilation or while wearing respirator.
<b>Subsection 3:</b>	<b>Personal Protective Equipment (PPE)</b>
Detail specifications for equipment	Wear eye/face protection, gloves and protective clothing.
General hygiene	Do not eat, drink or smoke while using this product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash hands thoroughly after handling.

## Section 9: Physical and Chemical Properties

<b>Appearance</b>	Green liquid	<b>pH</b>	~4-5
<b>Odour</b>	Distinctive	<b>Boiling point (degC)</b>	N/A
<b>Specific gravity (kg/L)</b>	1.5	<b>Freezing point (degC)</b>	N/A
<b>Solubility</b>	Soluble in water	<b>Flashpoint (degC)</b>	Not flammable

## Section 10: Stability and Reactivity

<b>Stability of substance</b>	Will decompose when heated (fire) or in contact with corrosives (Acid or Alkali).
<b>Conditions to avoid:</b>	None known.
<b>Material to avoid:</b>	None known.
<b>Hazardous decomposition products:</b>	Not known - include oxides of nitrogen and carbon.
<b>Hazardous polymerization:</b>	Will not occur.

## Section 11: Toxicological Information

<b>Data and Interpretation</b>	Calculated Oral LD50 470mg/kg. See Section 2 for general hazard information.
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## Section 12: Ecological Information

<b>Potential environmental interactions</b>	9.3B (Toxic to terrestrial vertebrates).  Designed as a fertiliser to aid plant growth. Concentrated or excessive release is likely to have a detrimental effect on the environment.
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## Section 13: Disposal Considerations

<b>Product disposal</b>	Dispose of only by using in accordance with the label instructions or at an approved landfill.
<b>Container disposal:</b>	Render packaging incapable of holding product and dispose of at an appropriate recycling depot (e.g. Agrecovery, <a href="http://www.agrecovery.co.nz">www.agrecovery.co.nz</a> ).

#### Section 14: Transport Information

<b>UN number:</b>	N/A
<b>DG Class and Subsidiary Group:</b>	N/A
<b>Proper shipping name:</b>	N/A
<b>Packing group:</b>	N/A
<b>HAZCHEM code:</b>	N/A
<b>Special precautions:</b>	Do not carry more than 5L on a passenger service vehicle.

#### Section 15: Regulatory Information

<b>Regulatory status</b>	Approved Pursuant to the HSNO Act 1996, under the Fertilisers (Subsidiary Hazard) Group Standard (HSR002571). See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for approval conditions.
<b>Trigger quantities:</b>	Locations holding more than these quantities must adhere to the relevant requirements:
SDS must be available for	Any quantity
Signage	1000L
Bunding	1000L
Emergency response plan	1000L

#### Section 16: Other Information

<b>Revision due:</b>	12 January 2023
<b>Additional information:</b>	Directions for use are found on the product label.
<b>Glossary:</b>	
ACVM	Agricultural Compounds and Veterinary Medicines (in relation to Group or Act 1997)
CAS	Chemical Abstract Services Number, used to uniquely identify chemical compounds
EPA	Environmental Protection Authority
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.