SAFETY DATA SHEET
ERGER

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : ERGER

Product code : 2432

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Fertilizer

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

AGRITRADE
1 Robin Mann Place
Christchurch Airport
Christchurch 8053
New Zealand
Ph 03 341 4587
Fax 03 341 4584
Free Phone 0800 333 855
agritrade@nzagritrade.co.nz

1.4. Emergency telephone number

Emergency number : 24 Hour Emergency Contact: 0800 CHEMCALL (0800 243622)

NZ POISON CENTRE CONTACT : 111 Police, Ambulance and Fire Brigade (available in New Zealand only)
0800 764 766 (National Poisons Information Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the Hazardous Substances (Classification) Notice 2020, New Zealand:
6.1D - Substances that are acutely toxic – Harmful (oral)
8.3A - Substances that are corrosive to ocular tissue

Hazard statement codes:
H302 - Harmful if swallowed
H318 - Causes serious eye damage

Precautionary statement codes – Prevention:
P102 - Keep out of reach of children
P103 - Read label/sds before use
P264 - Wash exposed areas thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves, protective clothing, eye protection, face shield

Precautionary statement codes – Response:
P101 - If medical advice is needed, have product container or label at hand
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor 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
P310 - Immediately call a POISON CENTER, or doctor/physician.

P330 - Rinse Mouth
P331 - Do not induce vomiting

Precautionary statement codes – Disposal:
P501 - Dispose of contents/container to comply with applicable local, national and international regulation

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

Signal word (CLP) : Danger

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Approval Status (NZIoC)
Oxirane, 2-methyl-, polymer with oxirane, mono (2-propylheptyl) ether	(CAS No) 166736-08-9 (EC no) not available (REACH-no) not available	20 - 25	Approved for use as a component in a product covered by the group standard disclosed in section 15.
Ammonium nitrate	(CAS No) 6484-52-2 (EC no) 229-347-8 (REACH-no) 01-2119490981-27-xxxx	15 - 20	HSNO Approval Code HSR001310 Restrictions / Exclusions: None
Nitric acid, ammonium calcium salt	(CAS No) 15245-12-2 (EC no) 239-289-5 (REACH-no) 01-2119493947-16-xxxx	15 - 20	Approved for use as a component in a product covered by the group standard disclosed in section 15
Other ingredients not subject to the provisions of the Hazardous Substances (identification) Regulations 2001, make up the product concentration to 100%			

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

: Self-protection of the first aider.

First-aid measures general

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical advice.

First-aid measures after skin contact	:	Remove contaminated clothing immediately and dispose of safely. Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	:	In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.
First-aid measures after ingestion	:	If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Immediately call a POISON CENTER (Ph: Australia 131 126; New Zealand 0800 764 766) or doctor/ physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	:	Decomposition products may be a hazard to health.
Symptoms/injuries after skin contact	:	None under normal use.
Symptoms/injuries after eye contact	:	Causes serious eye damage. redness, itching, tears.
Symptoms/injuries after ingestion	:	May cause irritation in mouth, gullet and stomach. May cause drowsiness or dizziness. Abdominal pain, nausea.

4.3. Indication of any immediate medical attention and special treatment needed

In case of inhalation of fumes : Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Water. Water spray, dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media	:	None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Do not inhale explosion and combustion gases. Combustion can be sustained, even in the absence of air.
Hazardous decomposition products in case of fire	:	On combustion forms: Nitrogen oxides. carbon oxides (CO and CO2).

5.3. Advice for firefighters

Precautionary measures fire	:	Evacuate the personnel away from the fumes.
Firefighting instructions	:	Cool down the containers exposed to heat with a water spray. Move undamaged containers from immediate hazard area if it can be done safely.
Protective equipment for firefighters	:	Extra personal protection: complete protective clothing including self-contained breathing apparatus.
Other information	:	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	:	Do not attempt to take action without suitable protective equipment. Wear personal protection equipment.
Emergency procedures	:	Immediately contact emergency personnel. Eliminate all ignition sources if safe to do so. Spilled material may present a slipping hazard.

6.1.2. For emergency responders

Protective equipment	:	Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray.
Emergency procedures	:	Evacuate unnecessary personnel. Eliminate all ignition sources if safe to do so. Spilled material may present a slipping hazard.

6.2. Environmental precautions

Avoid release to the environment. Avoid sub-soil penetration. Dilute with plenty of water. Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so.
Methods for cleaning up : Ventilate affected area. Wear personal protection equipment. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed containers for disposal. Wash with plenty of soap and water. Consult the appropriate authorities about waste disposal.
Other information : Do not allow uncontrolled discharge of product into the environment.

6.4. Reference to other sections

For disposal of residues refer to section 13 : Disposal considerations. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from sources of ignition - No smoking. Take any precaution to avoid mixing with Incompatible materials. Open and handle container with care.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Keep out of direct sunlight.
Incompatible materials : Acids. alkali. oxidizing agents. reducing agents. combustible materials. Powdered metals.
Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.
Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

New Zealand Workplace Exposure Standard:
No value assigned for any of the ingredients by the New Zealand Department of Labour (Health & Safety).

Oxirane, 2-methyl-, polymer with oxirane, mono (2-propylheptyl) ether (166736-08-9)
No value assigned for any of the ingredients by the New Zealand Department of Labour (Health & Safety).

Ammonium nitrate (6484-52-2)
No value assigned for any of the ingredients by the New Zealand Department of Labour (Health & Safety)

Ammonium nitrate (6484-52-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	21.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	37.6 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	12.8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	11.1 mg/m³
Long-term - systemic effects, dermal	12.8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 mg/l

Ammonium nitrate (6484-52-2)	
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

Nitric acid, ammonium calcium salt (15245-12-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	13.9 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	98 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	8.33 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	25.2 mg/m³
Long-term - systemic effects, dermal	8.3 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Safety glasses. Gloves. Protective clothing.

Materials for protective clothing:

Nitrile

Hand protection:

Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Break through time: ≥ 480 min. Thickness of glove material: 0.7 mm. Chemical resistant gloves (nitrile-rubber, PVC, neoprene)

Eye protection:

Wear eye glasses with side protection according to EN 166. Do not wear contact lenses

Skin and body protection:

Chemical resistant protective apron/clothing (tested to EN 14605 or equivalent)

Respiratory protection:

Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment. Combined gas/dust mask with filter type A/P2. Combination filtering device (DIN EN 141)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Brown.
Odour : characteristic.

Odour threshold	:	No data available
pH	:	5.7 at 20°C
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	not relevant
Freezing point	:	not relevant
Boiling point	:	> 100 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	not relevant Not flammable
Vapour pressure	:	not relevant
Relative vapour density at 20 °C	:	No data available
Relative density	:	1.28 g/cm³ at 20°C
Solubility	:	Water: Soluble in water
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	not applicable. Not expected to be explosive as none of the components is classified as explosive.
Oxidising properties	:	Oxidising liquids Not classified. Test method EU A.21. Annex V. Directive 67/548/EEC as amended.
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Combustion can be sustained, even in the absence of air.

10.4. Conditions to avoid

Overheating. Decomposes on exposure to temperature rise.

10.5. Incompatible materials

Acids. alkalis. Oxidizing agent. Reducing agents. Combustible materials. Powdered metals.

10.6. Hazardous decomposition products

When exposed to heat, may decompose liberating hazardous gases. Nitrogen oxides (NOx). Carbon dioxide (CO2). Phosphorus oxides. Reacts with alkalis to generate ammonia vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Ammonium nitrate (6484-52-2)	
LD50 oral rat	2950 mg/kg (OECD 401)
LD50 dermal rat	> 5000 mg/kg bodyweight (OECD 402)
LC50 inhalation rat (mg/l)	> 88.8 mg/l

Nitric acid, ammonium calcium salt (15245-12-2)	
LD50 oral rat	500 mg/kg (OECD 423)
LD50 dermal rat	2000 mg/kg (OECD 402)

Oxirane, 2-methyl-, polymer with oxirane, mono (2-propylheptyl) ether (166736-08-9)	
LD50 oral rat	300 - 2000 mg/kg

Skin corrosion/irritation : Not classified
pH: 5.7 at 20°C

Serious eye damage/irritation : Causes serious eye damage.
pH: 5.7 at 20°C

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ammonium nitrate (6484-52-2)	
LC50 fish 1	447 mg/l 48h
EC50 Daphnia 1	490 mg/l 48h
EC50 72h algae (1)	1700 mg/l 240h

Nitric acid, ammonium calcium salt (15245-12-2)	
LC50 fish 1	447 mg/l 48h
EC50 Daphnia 1	> 100 mg/l 48h
EC50 72h algae (1)	> 100 mg/l 72h

Oxirane, 2-methyl-, polymer with oxirane, mono (2-propylheptyl) ether (166736-08-9)	
LC50 fish 1	10 - 100 mg/l Brachydanio rerio (OECD 203)
EC50 Daphnia 1	10 - 100 mg/l Daphnia magna

Oxirane, 2-methyl-, polymer with oxirane, mono (2-propylheptyl) ether (166736-08-9)	
EC50 72h algae (1)	10 - 100 mg/l Scenedesmus subspicatus

12.2. Persistence and degradability

Oxirane, 2-methyl-, polymer with oxirane, mono (2-propylheptyl) ether (166736-08-9)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 60 % (OECD 301B)

12.3. Bioaccumulative potential

Ammonium nitrate (6484-52-2)	
BCF fish 1	(no bioaccumulation expected)

Oxirane, 2-methyl-, polymer with oxirane, mono (2-propylheptyl) ether (166736-08-9)	
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

ERGER	
Ecology - soil	Expected to be highly mobile in soil.

12.5. Results of PBT and vPvB assessment

ERGER	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Results of PBT assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Reuse or recycle following decontamination. External recovery and recycling of waste should comply with applicable local and/or national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / AND / NZS 5433:2012 Transport of Dangerous Goods on Land

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

New Zealand

Classification : Classified as non-hazardous according to the Hazardous Substances (Classification) Notice 2020, New Zealand.

HSNO Approval Number (Group Standard) : HSR002571. Fertiliser (Subsidiary Hazard) Group Standard 2006

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out

SECTION 16: Other information

Issue date: October 04, 2021
Classification and procedure used to derive the classification for mixtures:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Acute toxicity (oral), Category 4	Calculation method
Serious eye damage/eye irritation, Category 1	Calculation method

Abbreviations and acronyms:

SDS	Safety Data Sheet
	CAS - Chemical Abstracts Service
	GHS - Globally Harmonised System
	CSR - Chemical Safety Report

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
	PVC (Polyvinyl chloride).
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

Other information : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation

Classification and procedure used to derive the classification for mixtures:

Acute Tox. 4 (Oral)	H302	Calculation method
Eye Dam. 1	H318	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product