

SAFETY DATA SHEET

1. Identification

Product identifier: ENCOURAGE™ NANOCAL®

Other means of identification

Product code: 244-F-0-B

Recommended use: Fertiliser

Recommended restrictions: None Known

Manufacturer/Distributor information*:

Manufacturer	Distributor
Oro Agri, Inc. 2788 S. Maple Ave Fresno, CA 93725	Agrisource (2000) Ltd, 45 Kitchener Road, Pukekohe, New Zealand
+1 (559) 442-4996 SDS-NA@oroagri.com	Telephone Number: 2120 - 09 237 0442

Telephone Number: +1 (559) 442-4996

Email: SDS-NA@oroagri.com

*Refer to product label for New Zealand distributor contact information

Emergency Telephone Number:

For Hazardous Materials [or Dangerous Goods] Incidents
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night

Within New Zealand:
+(64)-98010034

Outside New Zealand:
+1(703)741-5970

2. Hazard(s) identification

Hazardous substance according to the HSNO Act 1996 Hazardous Substances (Classification) Notice 2017.
Approval: HSR002571; Fertilisers (Subsidiary Hazard) Group Standard 2017.

HSNO Classification: 6.1E (oral), 6.1E (dermal), 6.1D

Physical Hazards

Not classified

Health hazards

Acute toxicity: oral (category 5)

Acute toxicity: dermal (category 5)

Acute toxicity: inhalation (category 4)

Environmental hazards

Not classified as ecotoxic

Label elements



Signal word

Warning

Hazard statement

Harmful if inhaled. May be harmful in contact with skin. May be harmful if swallowed.

Precautionary statement**Prevention**

Avoid breathing mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves. Wear eye protection or face protection.

Response

If inhaled: Remove to fresh air and keep at rest in a comfortable for breathing.

If medical advice is needed, have product container or label at hand. Call a POISON CENTER or doctor/physician if you feel unwell.

Storage & Disposal

Do not contaminate water, food or feed by storage and disposal. Store and dispose of product and container in accordance with local regulations.

3. Composition/information on ingredients**Mixtures**

Chemical name	CAS Number	%
Proprietary Mixture ¹		Balance to 100
Calcium Carbonate	1317-65-3	20-30
Urea	57-13-6	5-10
Alcohol Ethoxylate	84133-50-6	1-5

Composition comments

¹ Components CAS numbers and ingredient concentrations are either non-hazardous or have been withheld as trade secret.

4. First-aid measures**Inhalation**

Move to fresh air and keep at rest in a position comfortable for breathing. Call a Physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Harmful if inhaled.

Indication of immediate medical attention and special treatment needed

In case of burns and frostbite: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

General information

Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. Do not breathe fumes.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

Material will burn in a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Be aware of potential for surfaces to become slippery. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get this material in contact with eyes. Avoid breathing fume/mist/vapors/spray. Use only outdoors in a well-ventilated area. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

This information is not available.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Wear face shield if there is risk of splashes.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators. Chemical respirator with organic vapor cartridge and full-face piece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Brown.
Odour	burnt like
Odour threshold	Not available.
pH	8 – 9.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	75°C (167°F)
Evaporate rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exposure limits	Not determined.

Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.3 - 1.35 (Water = 1)
Relative density temperature	73 °F (23 °C)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	>500 mpa·s

10. Stability and reactivity

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Thermal decomposition of this product can generate carbon monoxide and carbon dioxide. Sulphur oxides. Sodium oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation

Harmful if inhaled.

Skin contact

May be harmful in contact with skin.

Eye contact

May cause eye irritation.

Ingestion

May be harmful if swallowed.

Information on toxicological effects

Acute toxicity

Harmful if inhaled.

Product	Species	Test Results
ENCOURAGE NANOCAL (CAS Mixture)		

Acute Dermal Toxicity	Rat	5000 mg/kg, (OECD 402)
Acute Inhalation Toxicity	Rat	> 1.877 mg/l, (OECD 403)
Acute Oral Toxicity	Rat	> 2000 mg/kg, (OECD 425)
Skin corrosion/irritation	Rabbit	Non-irritating (OECD 404)
Serious eye damage/eye irritation	Rabbit	Non-irritating (OECD 405)
Respiratory or Skin Sensitization	Guinea Pig	Non-sensitizer (skin)

Germ cell mutagenicity

Not Available.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

2,6-di-tert-butyl-p-cresol(CAS 128-37-0) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

Not Available.

Specific target organ toxicity - single exposure

Not Available.

Specific target organ toxicity - repeated exposure

Not Available.

Aspiration hazard

Not Available.

Narcotic effects

Not Available.

Chronic effects

Not Available.

12. Ecological information**Ecotoxicity**

Not classified as ecotoxic.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available on bioaccumulation.

Mobility in soil

No data available for this product.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations**Disposal instructions**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packing

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

RID/ADR

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable

Additional Information

Not available.

15. Regulatory Information

Approved pursuant to the HSNO Act 1996, approval code HSR002571; Fertilisers (Subsidiary Hazard) Group Standard 2017. See www.epa.govt.nz for controls applying to the substance.

International regulations

Montreal Protocol: Not applicable

Stockholm Convention: Not applicable

Rotterdam Convention: Not applicable

16. Other information

Version #: Refer to version number in footer.

Revision Date: Refer to date of SDS in footer.

List of abbreviations

LD50: Lethal Dose, 50%.

LC50: Lethal Concentration, 50%.

EC50: Effective Concentration, 50%

Disclaimer

ORO AGRI cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. As conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained in accordance with all applicable occupational health and safety requirements.

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