

## SAFETY DATA SHEET

### 1. Identification

<b>Trade Name:</b>	<b>ENCOURAGE<sup>®</sup> NANOCAL<sup>®</sup></b>
<b>Other means of identification</b>	
<b>Product code:</b>	244-F-0-B
<b>Recommended use:</b>	Fertilizer
<b>Recommended restrictions:</b>	None Known
<b>Manufacturer information:</b>	
	Oro Agri, Inc. 2788 S. Maple Ave Fresno, CA 93725
<b>Telephone Number:</b>	+1 (559) 442-4996
<b>Email:</b>	<a href="mailto:SDS-NA@oroagri.com">SDS-NA@oroagri.com</a>
<b>Emergency Telephone Number:</b>	Incident Spill, Leak, Fire, Exposure or Accident Call CHEMTREC Day or Night
	Within USA and Canada: 1 (800) 424-9300
	Outside USA: +1 (703) 741-5970

### 2. Hazard(s) identification

#### Physical Hazards

Flammable liquids (Category 4)

#### Health hazards

Acute inhalation toxicity (Category 4)

#### OSHA defined hazards

Not classified.

#### Label elements



#### Signal word

Warning

#### Hazard statement

Harmful if inhaled.

#### Precautionary statement

#### Prevention

Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Keep away from flames and hot surfaces. No smoking. Wear protective gloves. Wear eye protection or face protection.

#### Response

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.

**Storage**

Store in a well-ventilated place. Keep cool.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)**

None known.

**Supplemental Information**

None.

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

Chemical name	CAS Number	%
Proprietary Mixture <sup>1</sup>		
Calcium Carbonate	1317-65-3	20-30
Urea	57-13-6	5-10
Alcohol Ethoxylate	84133-50-6	1-5

**Composition comments**

<sup>1</sup> Components not listed are either non-hazardous, below reportable limits or withheld as a trade secret.

**4. First-aid measures****Inhalation**

Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. 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. Exposed individuals may experience discomfort.

**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information**

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Wash contaminated clothing before reuse.

**5. Fire-fighting measures****Suitable extinguishing media**

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**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

**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**

In case of fire and/or explosion do not breathe fumes.

### Specific methods

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

### General fire hazards

Product does not sustain combustibility.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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. 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

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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 discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Do not get in eyes and avoid contact with skin and clothing. Avoid breathing mist or vapor. Avoid prolonged exposure. Persons susceptible to allergic reactions should not handle this product. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Proprietary Component	PEL	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>	Respirable fraction. Total dust.
Calcium Carbonate	PEL	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>	Respirable fraction. Total dust.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium Carbonate	TWA	5 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Respirable. Total

#### US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
Urea	TWA	10 mg/m <sup>3</sup>	Total particulate.

### Biological limit values

ENCOURAGE NANOCAL  
244F0B-US-0001 Version 04  
Revision Date: August 29, 2019

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

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. 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 a face shield if there is a risk of splashing.

#### 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

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. 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	Viscous suspension.
Color	Brown.
Odor	Burnt-like.
Odor threshold	Not available.
pH	8.0 - 9.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	75.0 °C (167.0 °F) Pensky-Martens Closed Cup
Evaporate rate	Not available.
Flammability (solid, gas)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.3 - 1.4 (Water = 1)
Solubility(ies)	
Solubility (water)	Not determined.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.

**Decomposition temperature** Not available.  
**Viscosity** 500 - 1000 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

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

### Information on likely routes of exposure

#### Inhalation

Harmful if inhaled.

#### Skin contact

Expected to be a low dermal hazard.

#### Eye contact

No adverse effects due to eye contact are expected.

#### Ingestion

Expected to be a low ingestion hazard.

### Symptoms related to the physical, chemical and toxicological characteristics

Harmful if inhaled. Exposed individuals may experience discomfort.

### Information on toxicological effects

Product	Species	Test Results
ENCOURAGE NANOCAL (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, (OECD 402)
<i>Inhalation</i>		
LD50	Rat	> 1.877 mg/l, (OECD 403)
<i>Oral</i>		
LD50	Rat	5000 mg/kg, (OECD 423)

### Acute toxicity

Not expected to be acutely toxic.

**Skin corrosion/irritation**

Non-irritating

**Serious eye damage/eye irritation**

Not classified

**Respiratory or skin sensitization****Respiratory sensitization**

Not a respiratory sensitizer.

**Skin sensitization**

Non-sensitizing.

**Germ cell mutagenicity**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

Not classifiable as to carcinogenicity to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**NTP Report on Carcinogens**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Reproductive toxicity**

Not classified.

**Specific target organ toxicity - single exposure**

Not classified.

**Specific target organ toxicity - repeated exposure**

Not classified.

**Aspiration hazard**

Not an aspiration hazard.

**Chronic effects**

Prolonged inhalation may be harmful.

**12. Ecological information****Ecotoxicity**

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability**

No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**

Urea -2.11

**Mobility in soil**

No data available.

**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. Dispose of contents/container in

ENCOURAGE NANOCAL  
244F0B-US-0001 Version 04  
Revision Date: August 29, 2019

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**

**DOT**

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.

**15. Regulatory Information**

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**

Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) list**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations**

One or more components of this material is listed on:  
 US. Massachusetts RTK - Substance List  
 US. New Jersey Worker and Community Right-to-Know Act  
 US. Pennsylvania Worker and Community Right-to-Know Law  
 US. Rhode Island RTK

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information**

Version #: 03

NFPA ratings



**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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