



Rooted in Science

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name Calspra-Mg 5-0-0 + 6% Ca, 0.4% Mg

SDS Date January 7, 2020

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Foliar nutrient

Uses Advised Against: To be used only where there is a recognized need. Do not exceed the appropriate dose rates.

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer: Floratine Products Group, Inc.
355 East South Street
Collierville, TN 38017
+1 901-853-2898

1.4 Emergency Telephone Number

Emergency Spill Information 1(800) 535-5053 for US and Canada (INFOTRAC)
+1(352) 323-3500 for International Calls (call INFOTRAC collect)

Other Product Information: cs@floratine.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008):

Eye Irritation Category 2

EU Classification (67/548/EEC): Irritant XI R36

2.2 Label Elements

Warning!



Hazard Phrases

H319 Causes serious eye irritation.

Precautionary Phrases:

P264 Wash thoroughly after handling.

P280 Wear eye protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical attention.

2.3 Other Hazards: None**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures**

Chemical Name	CAS Number / EINECS Number / REACH Reg. Number	% (w/w)	EU Classification (67/548/EEC)	CLP/GHS Classification (1272/2008)
Calcium Nitrate	Proprietary	15-40%	Xi R36	Eye Irrit. 2 (H319)
Magnesium Nitrate	Proprietary	1-10%	Not dangerous	Not hazardous

See Section 16 for full text of GHS and EU Classifications.

SECTION 4: FIRST AID MEASURES**4.1 Description of First Aid Measures****First Aid****Eye contact:** Immediately flush eye with water for 15 minutes while lifting the upper and lower lids. Seek medical attention.**Skin contact:** Wash with soap and water. Get medical attention if irritation develops.**Inhalation:** Remove victim to fresh air. Get medical attention if irritation persists.**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. If the person is alert, have them rinse their mouth with water and sip one glass of water. Call a poison center or physician for advice. Never give anything by mouth to an unconscious or drowsy person.**See Section 11 for more detailed information on health effects.****4.2 Most important symptoms and effects, both acute and delayed:** Causes eye irritation. Prolonged skin contact may cause irritation. Ingestion may cause gastrointestinal irritation with nausea and diarrhea.**4.3 Indication of any immediate medical attention and special treatment needed:** Immediate medical attention should not be needed unless large amounts are swallowed.**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing Media:** Use any media that is suitable for the surrounding fire. Water can be used to cool fire exposed containers**5.2 Special Hazards Arising from the Substance or Mixture****Unusual Fire and Explosion Hazards:** None**Combustion Products:** Not combustible**5.3 Advice for Fire-Fighters:** Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate protective equipment. Avoid direct contact with spilled material.

6.2 Environmental Precautions:

Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations.

6.3 Methods and Material for Containment and Cleaning Up:

Pick up or sweep up material and place in an appropriate container for use or disposal.

6.4 Reference to Other Sections:

Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

SECTION 7: HANDLING and STORAGE

7.1 Precautions for Safe Handling:

Avoid eye and prolonged skin contact. Use with adequate ventilation. Use reasonable care in handling. Do not eat, drink or smoke while using product. Wash thoroughly with soap and water after handling.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

Protect containers from physical damage. Keep from freezing. Keep containers closed. Empty containers retain product residues. Follow all SDS precautions in handling empty containers. Store away from food and feed.

7.3 Specific end use(s):

Industrial uses: None identified

Professional uses: Foliar nutrient

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	US OEL	EU IOEL	UK OEL	Biological Limit Value
Calcium Nitrate	None Established	None Established	None Established	None Established
Magnesium Nitrate	None Established	None Established	None Established	None Established

8.2 Exposure Controls:

Recommended Monitoring Procedures: None.

Appropriate Engineering Controls: Good outdoor ventilation should be adequate under normal conditions.

Personal Protective Measurers

Eye/face Protection: Chemical goggles recommended if needed to avoid eye contact.

Skin Protection: Impervious clothing is recommended if needed to avoid prolonged/repeated skin contact.

Hands: Impervious gloves are recommended if needed to avoid prolonged/repeated skin contact.

Respiratory Protection: None needed under normal use conditions with adequate ventilation. If dust is generated, an approved particulate respirator can be used. Use respirators in accordance with local and national regulations.

Other protection: Suitable washing facilities should be available in the work area.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties

Appearance: Medium brown liquid
Odor Threshold: Not applicable
Melting/Freezing Point: Not available
Flash Point: None
Lower Flammability Limit: None
Upper Flammability Limit: None
Vapor Density(Air=1): Not applicable
Solubility: Complete
Autoignition Temperature: None
Viscosity: Not applicable
Oxidizing Properties: None
Molecular Formula: Mixture

Odor: Slightly sweet
pH: 2.86
Boiling Point: 100°C
Evaporation Rate: Not applicable r
Vapor Pressure: Greater than 1

Relative Density: 1.256
Octanol/Water Partition Coefficient: Not established
Decomposition Temperature: Not applicable
Explosive Properties: None
Specific Gravity (H₂O= 1): 1.256
Molecular Weight: Mixture

9.2 Other Information: None available

SECTION 10: STABILITY and REACTIVITY

10.1 Reactivity: Not reactive under normal conditions

10.2 Chemical Stability: Stable.

10.3 Possibility of Hazardous Reactions: Contact with strong oxidizers may cause an exothermic reaction producing heat.

10.4 Conditions to Avoid: Avoid excessive heat and freezing.

10.5 Incompatible Materials: Incompatible with strong oxidizing agents.

10.6 Hazardous Decomposition Products: Decomposition may produce carbon monoxide, carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eye Contact: Causes irritation with redness and tearing.

Skin contact: Prolonged skin contact may cause irritation.

Inhalation: Excessive inhalation of dust may cause upper respiratory tract irritation.

Ingestion: Swallowing may cause gastrointestinal effects including nausea and diarrhea

Acute toxicity: No data available for the product.

Calcium Nitrate: Oral rat LD50 2120 mg/kg; Dermal rabbit LD50 >5000 mg/kg

Magnesium Nitrate: Oral rat LD50 >2000 mg/kg; Dermal rat LC50 >2000 mg/kg

Skin corrosion/irritation: Magnesium Nitrate is not irritating to human skin. Calcium Nitrate is not irritating to rabbit skin.

Eye damage/ irritation: Magnesium Nitrate and Calcium Nitrate are not irritating to rabbit eyes.

Respiratory Irritation: No data available. Expected to cause only temporary irritation.

Respiratory Sensitization: No data available.

Skin Sensitization: Magnesium Nitrate was negative in a Guinea pig maximization test.

Germ Cell Mutagenicity: Magnesium Nitrate was negative in an in vitro mammalian cell gene mutation assay and in vitro mammalian chromosome aberration test. Calcium Nitrate was negative in an in vitro mammalian chromosome aberration test.

Carcinogenicity: No data available. None of the components of this product are listed as carcinogens by IARC or the EU Dangerous Substances Directive.

Reproductive Toxicity: In a two generation study, rats were administered a Magnesium Nitrate for a maximum of 29 days for males and 54 days for females. No adverse general effects were seen on general toxicity. A NOAEL of 1000 mg/kg was derived for reproduction and developmental toxicity. In a developmental study, mice were administered 189 mg/kg to pregnant mice for 10 days. NOAEL of >189 mg/kg was established for maternal toxicity and teratogenicity.

Specific Target Organ Toxicity:

Single Exposure: No data available

Repeat Exposure: No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Calcium Nitrate: 96 hr EC50 Pimephales promelas 4630 mg/L; 48 hr EC50 daphnia magna 2400 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 2900 mg/L
Magnesium Nitrate: 96 hr LC50 Pimephales promelas 541 mg/L; 48 hr LC50 daphnia magna 140 mg/L;

12.2 Persistence and degradability: Biodegradation is not applicable to inorganic substances such as Magnesium Nitrate and Calcium Nitrate.

12.3 Bioaccumulative Potential: No data available. Not expected to be bioaccumulative.

12.4 Mobility in Soil: In the soil, product follows natural cycle to provide plant nutrients.

12.5 Results of PVT and vPvB assessment: Not required.

12.6 Other Adverse Effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Dispose in accordance with local/ and national regulations. Not considered hazardous waste according to EU regulations.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated	None	None	None
IMDG	None	Not Regulated	None	None	None
IATA/ICAO	None	Not Regulated	None	None	None

14.6 Special Precautions for User: None

14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: Not determined.

SECTION 15: REGULATORY INFORMATION

US Regulations

CERCLA Section 103: The normal application of fertilizers is exempt from CERCLA reporting. If an accidental release occurs, contact Floratine Products Group for information.

SARA Hazard Category (311/312): Acute Health Hazard

SARA 313: Products used in routine agricultural operations and fertilizers held for resale by retailers is excluded from SARA 313 reporting. Contact Floratine Products Group for additional information.

California Proposition 65: This product contains the following substances known to the State of California to cause cancer and/or reproductive harm (birth defects): None known.

International Chemical Inventories

US EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory or exempt.

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

Japan: All of the components in this product are listed on the Japanese Existing and New Chemical Substances (ENCS) inventory or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

New Zealand: All of the components in this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempt.

Philippines: All of the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

Taiwan: All of the components of this product are listed on the National Existing Chemical Inventory (NECI) in Taiwan or exempt.

SECTION 16: OTHER INFORMATION

CLP/GHS Classification and H Phrases for Reference (See Section 3)

Eye Irrit. 2 Irritation Category 2

H319 Causes serious eye irritation.

This safety data sheet provides health and safety information. The product is to be used in applications consistent with best farming practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information data sheet is to the best of Floratine's knowledge correct as at the date of publication. Neither Floratine, importer or local supplier accepts liability for any loss or damage resulting from reliance on this information. Further information on this product may be obtained from the supplier whose name, address and telephone number will be found on the product container. The information provided herein is offered solely for your consideration, investigation and verification. This information herein is provided by Floratine in good faith as accurate at the time of writing but without guarantee. This information includes information which has been generated by other parties and provided to Floratine and which Floratine has not independently verified. The information provided herein relates only to the specific product designated and may not be valid if the product is used in combination with any other materials or in any process