



FBSCIENCES INC
Safety Data Sheet
CellMate Foliar Plus Mo

SECTION 1: Identification

1.1 Product identifier

Product name CellMate Foliar Plus Mo

Product number FBS 1188

1.3 Recommended use of the chemical and restrictions on use

Fertilizer

1.4 Supplier's details

Name FBSciences Inc
Address 153 North Main Street Suite 100
Collierville TN 38017
USA

Telephone 901-221-1200

1.5 Emergency phone number(s)

CHEMTREC 1-800-424-9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Eye damage/irritation, Cat. 2A

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

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H319 Causes serious eye irritation

Precautionary statement(s)

P264 Wash hands thoroughly after handling.
P280 Wear eye protection/face 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 advice/attention.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Sodium molybdate

Concentration Not specified
EC no. 231-551-7
CAS no. 7631-95-0

2. Calcium chloride

Concentration Not specified
EC no. 233-140-8
CAS no. 10043-52-4
Index no. 017-013-00-2

- Serious eye damage/eye irritation, Cat. 2

H319 Causes serious eye irritation

3. Boric Acid (H₃BO₃) reaction products with ethanolamine

Concentration Not specified
EC no. 302-207-4
CAS no. 94095-04-2

4. Nitric acid, ammonium calcium salt (1:?:?)

Concentration Not specified
CAS no. 15245-12-2

Trade secret statement (OSHA 1910.1200(i))

*Exact percentage has been withheld as trade secret.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Get medical advice/attention if you feel unwell.

If inhaled Remove person to fresh air and keep comfortable for breathing.

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In case of skin contact	Wash off with soap and plenty of water. Get medical attention if symptoms occur.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice. Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
If swallowed	Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products:

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, and ammonia

Calcium chloride: Hydrogen chloride gas, Calcium oxide

5.3 Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Further information

Avoid breathing dusts, vapors or fumes from burning materials.

In case of inhalation of decomposition products in a fire, symptoms may be delayed.

SECTION 6: Accidental release measures

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6.1 Personal precautions, protective equipment, and emergency procedures

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Sodium molybdate (CAS: 7631-95-0 EC: 231-551-7)

TLV® (Inhalation): 0.5 mg/m³ (ACGIH)

Lower Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans

PEL-TWA (Inhalation): 0.5 mg/m³ (Cal/OSHA)

PEL-TWA (Inhalation): 5 mg/m³ (OSHA)

8.2 Appropriate engineering controls

General industrial hygiene practice. Provide eyewash station.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear eye/face protection. Wear safety glasses with side shields or goggles.

Skin protection

Handle with protective gloves that are impervious to the chemical substance.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Respiratory protection

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In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Liquid, brown color
Odor	slight ammonia
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	-9C
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	Complete in water
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

None Known

Sodium molybdate: Strong oxidizing agents

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Calcium chloride: Strong acids, Borane/boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Calcium chloride is attacked by bromine trifluoride

10.6 Hazardous decomposition products

Oxides of nitrogen

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Not determined.

Skin corrosion/irritation

Not determined.

Serious eye damage/irritation

May cause irritation, stinging, tearing, itching, swelling, and/or redness

Respiratory or skin sensitization

Not determined.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information

Toxicity

Calcium Chloride – Toxicity to fish: LC50 - *Lepomis macrochirus* - 10,650 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* (Water flea)

- 2,400 mg/l - 48 h

Persistence and degradability

No data available.

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Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

SECTION 13: Disposal considerations

Disposal of the product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Disposal of contaminated packaging

Dispose in a safe manner in accordance with local/national regulations

Waste treatment

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal

Prevent liquid from entering sewers, watercourses, underground or low areas.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Toxic Substances Control Act (TSCA) Inventory

Not determined

SARA 302 Components

Not applicable.

SARA 313 Components

Not applicable.

Massachusetts Right To Know Components

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None of the components are listed.

New Jersey Right To Know Components

None of the components are listed.

Pennsylvania Right To Know Components

None of the components are listed.

California Prop. 65 Components

This material is not known to contain any chemicals currently listed.

Canadian Domestic Substances List (DSL)

Chemical name: Molybdate (MoO_4^{2-}), disodium, (β ?-4)-

CAS: 7631-95-0

Canadian Domestic Substances List (DSL)

Chemical name: Molybdenum sodium oxide

CAS: 12680-49-8

Pennsylvania Right To Know Components

Calcium chloride

CAS-No. 10043-52-4

New Jersey Right To Know Components

Calcium chloride

CAS-No. 10043-52-4

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

SARA 311/312 Hazards

Acute Health Hazard

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

Canadian Domestic Substances List (DSL)

Chemical name: Calcium chloride (CaCl_2)

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CAS: 10043-52-4

Canadian Non-Domestic Substances List (NDSL)

Chemical name: Nitric acid, ammonium calcium salt

CAS: 15245-12-2

15.2 Chemical Safety Assessment

No data available.

SECTION 16: Other information

16.1 Further information/disclaimer

The directions for use of this product are believed to be adequate and must be followed carefully. The use of this product is beyond the control of the manufacturer, and, therefore, to the extent consistent with applicable law, no warranty, representation, or guarantee of any kind, expressed or implied, is made as to the effects of such use or any results obtained if not used in accordance with printed directions and established safe practice or if unusual or extraordinary weather conditions occur. To the extent consistent with applicable law, the buyer's exclusive remedy and manufacturer's or seller's exclusive liability in tort or otherwise, shall be limited, at the manufacturer's option, to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed.

The information and recommendations contained herein are based upon data believed to be correct. However, there is no guarantee or warranty of any kind expressed or implied made with respect to the information contained herein.