

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : 10% CALCIUM

1.2. Recommended use and restrictions on use

1.3. Supplier

INNICTIS® BIOSCIENCE
PLANT HEALTH TECHNOLOGIES
P.O. Box 9296
Boise ID 83707, - USA
T 855-466-8428

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Precautionary statements (GHS US) : If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Always wash hands and face immediately after handling this product, and once again before leaving the workplace
Wear protective gloves, protective clothing.
Take off contaminated clothing and wash it before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN : Wash with plenty of soap and water. Call a POISON CENTER or doctor if you feel unwell. Specific treatment.
IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice / attention.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Water	(CAS-No.) 7732-18-5		Not classified
ammonium calcium nitrate	(CAS-No.) 15245-12-2		Eye Irrit. 2A, H319
acetic acid	(CAS-No.) 64-19-7		Flam. Liq. 3, H226 Skin Corr. 1A, H314

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Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

- Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
- Incompatible products : Strong bases. Strong acids.

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Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

10% CALCIUM	
No additional information available	
Water (7732-18-5)	
No additional information available	
acetic acid (64-19-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (ppm)	10 ppm
ACGIH STEL (ppm)	10 ppm
ammonium calcium nitrate (15245-12-2)	
No additional information available	

8.2. Appropriate engineering controls

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless
Odour	: characteristic
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 12.2 lbs/gal
Solubility	: No data available

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Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

ammonium calcium nitrate (15245-12-2)

LD50 oral rat	> 2000 mg/kg (Rat)
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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
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

Viscosity, kinematic : No data available

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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SECTION 12: Ecological information

12.1. Toxicity

acetic acid (64-19-7)	
LC50 fish 1	88 mg/l (96 h; Pimephales promelas; Pure substance)
EC50 Daphnia 1	6000 mg/l (24 h; Daphnia magna; Pure substance)
EC50 other aquatic organisms 1	> 5000 mg/l (5 h; Activated sludge; Pure substance)
LC50 fish 2	75 mg/l (96 h; Lepomis macrochirus; Pure substance)
EC50 Daphnia 2	32 mg/l (48 h; Artemia salina; Pure substance)
TLM fish 1	47 mg/l (96 h; Lepomis macrochirus; Pure substance)
TLM fish 2	100 ppm (96 h; Carassius auratus; Pure substance)
Threshold limit other aquatic organisms 1	12 - 1350,Protozoa; Pure substance
Threshold limit algae 1	4000 mg/l (Scenedesmus quadricauda; Pure substance)
Threshold limit algae 2	90 mg/l (Microcystis aeruginosa; Pure substance)

12.2. Persistence and degradability

10% CALCIUM	
Persistence and degradability	Not established.
Water (7732-18-5)	
Persistence and degradability	Not established.
acetic acid (64-19-7)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test) data on mobility of the components available. Not established.
Biochemical oxygen demand (BOD)	0.6 – 0.74 g O ₂ /g substance
Chemical oxygen demand (COD)	1.03 g O ₂ /g substance
ThOD	1.07 g O ₂ /g substance
BOD (% of ThOD)	0.56 – 0.69 % ThOD
ammonium calcium nitrate (15245-12-2)	
Persistence and degradability	Biodegradability in water: no data available. Not established.

12.3. Bioaccumulative potential

10% CALCIUM	
Bioaccumulative potential	Not established.
Water (7732-18-5)	
Bioaccumulative potential	Not established.
acetic acid (64-19-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.31 – -0.17
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
ammonium calcium nitrate (15245-12-2)	
Bioaccumulative potential	No bioaccumulation data available. Not established.

12.4. Mobility in soil

acetic acid (64-19-7)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Other information : Avoid unintentional release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid unintentional release to the environment.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

10% CALCIUM

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

ammonium calcium nitrate	CAS-No. 15245-12-2	%
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acetic acid (64-19-7)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

acetic acid (64-19-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Component	State or local regulations
acetic acid(64-19-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-statements:

H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.

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SDS US (GHS HazCom 2012)

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.