Safety Data Sheet

Issue Date: 10-Apr-2024 **Revision Date:** 10-Apr-2024 **Version** 1

1. IDENTIFICATION

Product identifier
Product Name BLOOM A 2.0 (3-0-2)

Other means of identification
SDS # RXG-037

Recommended use of the chemical and restrictions on use
Recommended Use For industrial use.

Details of the supplier of the safety data sheet
Supplier Address
Rx Green Technologies, LLC
15 Tinker Ave.
Londonderry, NH 03053
Phone: (603) 769-3450 Fax: (603) 769-3450

Emergency telephone number
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear green liquid **Physical state** Liquid

Classification

Acute toxicity - Oral	Category 4
Skin sensitization	Category 1

Signal Word
Warning

Hazard statements
Harmful if swallowed
May cause an allergic skin reaction

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards
Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Calcium nitrate	15245-12-2	15-20
Potassium Nitrate	7757-79-1	1-5
Magnesium nitrate (hexahydrate)	13446-18-9	1-5
Trade Secret	Proprietary	<1
Trade Secret	Proprietary	<1
Boric Acid	10043-35-3	<0.1
Ethylenediaminetetraacetic acid copper salt, tetrahydrate	14025-15-1	<0.1
Sodium Molybdate	10102-40-6	<0.1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation Remove to fresh air.

Ingestion Call a poison center or doctor/physician if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms Harmful if swallowed. May cause an allergic reaction. Causes mild skin irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical
Not determined.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid 77-92-9	-	15 mg / m3 (Total)	-
Manganese EDTA 15375-84-5	-	Ceiling: 5 mg/m^3 Mn	IDLH: 500 mg/m^3 Mn TWA: 1 mg/m^3 Mn STEL: 3 mg/m^3 Mn

Boric Acid 10043-35-3	STEL: 6 mg/m^3 inhalable particulate matter TWA: 2 mg/m^3 inhalable particulate matter	-	-
Ethylenediaminetetraacetic acid copper salt, tetrahydrate 14025-15-1	TWA: 1 mg/m^3 Cu dust and mist	-	IDLH: 100 mg/m^3 Cu dust and mist TWA: 1 mg/m^3 Cu dust and mist
Sodium Molybdate 10102-40-6	TWA: 0.5 mg/m^3 Mo respirable particulate matter	TWA: 5 mg/m^3 Mo (vacated) TWA: 5 mg/m^3 Mo	IDLH: 1000 mg/m^3 Mo

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Clear green liquid	**Odor**	Not determined
Color	Green	**Odor Threshold**	Not determined

Property	**Values**	**Remarks • Method**
pH	2.2-3.1	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Flash point	No data available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor Pressure	Not determined	
Vapor Density	No data available	
Relative Density	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	No data available	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

Other information
Liquid Density 9.5 lbs/gal

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Keep out of reach of children.

Incompatible materials
None known based on information supplied.

Hazardous decomposition products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Do not inhale.

Ingestion Harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium nitrate 15245-12-2	300 - 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Potassium Nitrate 7757-79-1	= 3015 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 0.527 mg/L (Rat) 4 h
Magnesium nitrate (hexahydrate) 13446-18-9	= 5440 mg/kg (Rat)	-	-
Trade Secret	= 481 mg/kg (Rat)	-	= 1.23 mg/L (Rat) 4 h
Trade Secret	232 - 249 mg/kg (Rat) = 120 mg/kg (Rat)	= 200 mg/kg (Rabbit)	= 0.11 mg/L (Rat) 4 h
Citric Acid 77-92-9	= 3 g/kg (Rat)	> 2000 mg/kg (Rat)	-
Manganese EDTA 15375-84-5	-	-	> 5.16 mg/L (Rat) 4 h
Boric Acid 10043-35-3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.12 mg/L (Rat) 4 h

Ethylenediaminetetraacetic acid copper salt, tetrahydrate 14025-15-1	-	-	> 5.3 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes mild skin irritation.

Sensitization May cause an allergic skin reaction.

Carcinogenicity Nitrate or nitrite ingested under conditions that result in endogenous nitrosation are considered carcinogens.

Chemical name	ACGIH	IARC	NTP	OSHA
Calcium nitrate 15245-12-2		Group 2A		X
Potassium Nitrate 7757-79-1		Group 2A		X
Magnesium nitrate (hexahydrate) 13446-18-9		Group 2A		X
Boric Acid 10043-35-3		Group 2A		X

Legend

IARC (International Agency for Research on Cancer)
Group 2A - Probably Carcinogenic to Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 1,747.90 mg/kg
Dermal LD50 10,537.40 mg/kg
ATEmix (inhalation-dust/mist) 6.29 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Trade Secret	EC50: 0.11 - 0.16mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.03 - 0.13mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =1.6mg/L (96h, Oncorhynchus mykiss)	EC50: =4.71mg/L (48h, Daphnia magna) EC50: 0.12 - 0.3mg/L (48h, Daphnia magna) EC50: 0.71 - 0.99mg/L (48h, Daphnia magna)
Citric Acid 77-92-9		LC50: =1516mg/L (96h, Lepomis macrochirus)	
Boric Acid 10043-35-3			EC50: 115 - 153mg/L (48h, Daphnia magna)
Ethylenediaminetetraacetic acid copper salt, tetrahydrate 14025-15-1		LC50: =555mg/L (96h, Lepomis macrochirus)	

Persistence/Degradability

Not determined.

Bioaccumulation
There is no data for this product.

Mobility

Chemical name	Partition coefficient
Trade Secret	-0.26
Trade Secret	0.75
Boric Acid 10043-35-3	-1.09

Other adverse effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Potassium Nitrate 7757-79-1	Ignitable Reactive
Boric Acid 10043-35-3	Toxic
Ethylenediaminetetraacetic acid copper salt, tetrahydrate 14025-15-1	Toxic

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AIIC
Calcium nitrate	X	ACTIVE	X	X			X		
Potassium Nitrate	X	ACTIVE	X	X	X	X	X	X	X
Magnesium nitrate (hexahydrate)					X	X		X	X
Ferrous EDTA					X				
Trade Secret	X	ACTIVE	X	X	X	X	X	X	X
Trade Secret	X	ACTIVE	X	X	X	X	X	X	X
Manganese EDTA	X	ACTIVE	X	X	X	X			X
Citric Acid	X	ACTIVE	X	X	X	X	X	X	X
Boric Acid	X	ACTIVE	X	X	X	X	X	X	X
Ethylenediaminetetraacetic acid copper salt, tetrahydrate	X	ACTIVE	X	X	X	X	X	X	X
EDTA Zinc	X	INACTIVE	X		X				
Sodium Molybdate					X	X		X	X

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

AICS *- Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Potassium Nitrate - 7757-79-1	7757-79-1	1-5	1.0
Magnesium nitrate (hexahydrate) - 13446-18-9	13446-18-9	1-5	1.0
Manganese EDTA - 15375-84-5	15375-84-5	<1	1.0
Ethylenediaminetetraacetic acid copper salt, tetrahydrate - 14025-15-1	14025-15-1	<0.1	1.0
EDTA Zinc - 12519-36-7	12519-36-7	<0.1	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ethylenediaminetetraacetic acid copper salt, tetrahydrate		X		

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Calcium nitrate 15245-12-2	X		
Potassium Nitrate 7757-79-1	X	X	X
Magnesium nitrate (hexahydrate) 13446-18-9	X		
Manganese EDTA 15375-84-5	X		X
Boric Acid 10043-35-3	X		
Ethylenediaminetetraacetic acid copper salt, tetrahydrate 14025-15-1	X		X
EDTA Zinc 12519-36-7	X		X

16. OTHER INFORMATION

NFPA	**Health hazards**	**Flammability**	**Instability**	**Special hazards**
	-	-	-	-
HMIS	**Health hazards**	**Flammability**	**Physical hazards**	**Personal Protection**
	-	-	-	Not determined

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Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet