SAFETY DATA SHEET (SDS)

PREPARED: January 2025

REVISION: 1.0



SECTION 1: IDENTIFICATION

Product Identifier: RowVive

Alternate Name: Micronutrient Fertilizer Blend **Recommended Use**: Fertilizer, Soil Amendment **Restrictions on Use**: Not for human consumption

Manufacturer:

AgriBio Systems 2335 Fox Ln Jacksonville, IL 62650

Phone: 217-248-6579

Email: info@agribiosystems.com

Emergency Contact:

24-Hour Emergency: 217-248-6579

National Poison Control Center: 1-800-222-1222

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification:

- Skin Irritation (Category 3)
- Eye Irritation (Category 2B)

Label Elements:

Signal Word: Warning

Hazard Pictograms:



Hazard Statements:

- H316: Causes mild skin irritation.
- H320: Causes eye irritation.

Precautionary Statements:

- P264: Wash hands and exposed skin thoroughly after handling.
- P280: Wear protective gloves/protective clothing/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.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P337+P313: If eye irritation persists: Get medical advice/attention.

Other Hazards: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition:

Ingredient	CAS Number	% (By Weight)	Note
Urea	57-13-6	<13.5%	
Manganese Sulfate	7785-87-7	~2.0%	
Sodium Octoborate	12280-03-4	~1.0%	
Fulvic Acid	479-66-3	<1.0%	

Other ingredients are non-hazardous and/or not required to be listed under OSHA HazCom 2012.

SECTION 4: FIRST-AID MEASURES

Inhalation: Move to fresh air. Seek medical advice if symptoms persist.

Skin Contact: Wash thoroughly with soap and water. If irritation persists, seek medical attention.

Eye Contact: Flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses if present and easy to do. If irritation persists, seek medical attention.

Ingestion: May cause nausea if swallowed. Do not induce vomiting. Rinse mouth with water and seek medical advice if symptoms persist. Ingestion may cause mild gastrointestinal discomfort, such as nausea. Do not induce vomiting unless directed by medical personnel. Rinse mouth with water and seek medical advice if symptoms persist.

Most Important Symptoms/Effects: Mild eye and skin irritation.

Immediate Medical Attention/Special Treatment: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Not applicable. Product is non-flammable.

Unsuitable Extinguishing Media: Not applicable.

Specific Hazards: May release irritating or toxic fumes under extreme heat conditions.

Special Protective Equipment for Firefighters: Use self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate PPE including safety glasses and gloves.

Environmental Precautions: Prevent large spills from entering waterways, storm drains, or sewers. Report releases to relevant local, state, and federal agencies if required by regulations.

Methods for Containment and Cleanup: Contain spill using absorbent material (e.g., sand, vermiculite). Collect in suitable containers for disposal. Clean contaminated area thoroughly. Dispose of materials in accordance with all local, state, and federal regulations.

Secondary Containment: For large spills, provide secondary containment in accordance with EPA and local requirements.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Use recommended PPE, maintain proper ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from direct sunlight. Keep container tightly closed when not in use. Store away from strong oxidizers and acids. Keep out of reach of children.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

None established.

Personal Protective Equipment (PPE):

- **Eye Protection**: Safety goggles recommended.
- **Skin Protection**: Chemical-resistant gloves recommended.
- **Respiratory Protection**: Not required under normal conditions.
- **General Hygiene**: Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink, or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Dark brown to amber liquid
Odor	Smoky
рН	5-7
Melting/Freezing Point	0°C
Boiling Point/Range	~100°C
Flash Point	Not applicable
Evaporation Rate	Similar to water
Flammability	Non-flammable
Upper/Lower Flammability	Not applicable
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	~1.2-1.3 (25°C)
Solubility	Mostly soluble
Partition Coefficient	Not determined
Auto-ignition Temperature	Not applicable

Property Value

Decomposition Temperature Not determined

Viscosity Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: None expected under normal use.

Conditions to Avoid: Extreme heat, freezing temperatures.

Incompatible Materials: Strong oxidizers, strong acids.

Hazardous Decomposition Products: May produce oxides of nitrogen, sulfur, manganese, boron, potassium, and carbon under high-temperature conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin contact, eye contact, ingestion, inhalation.

Potential Health Effects:

- **Inhalation**: Mild respiratory irritation possible.
- **Skin Contact**: May cause mild irritation.
- **Eye Contact**: Irritation expected.
- Ingestion: May cause nausea if swallowed. Do not induce vomiting. Rinse mouth with water
 and seek medical advice if symptoms persist. Ingestion may cause mild gastrointestinal
 discomfort, such as nausea. Do not induce vomiting unless directed by medical personnel.
 Rinse mouth with water and seek medical advice if symptoms persist.

Acute Toxicity: Low acute toxicity under normal use conditions.

Skin Corrosion/Irritation: May cause mild skin irritation.

Serious Eye Damage/Irritation: Causes eye irritation.

Respiratory or Skin Sensitization: No data available.

Germ Cell Mutagenicity: No data available.

Carcinogenicity: Not classified as carcinogenic by NTP, IARC, or OSHA.

Reproductive Toxicity: No data available.

STOT - Single Exposure: No data available.

STOT - Repeated Exposure: No data available.

Aspiration Hazard: No data available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Excessive application may impact local ecosystems.

Persistence and Degradability: Components are partially biodegradable.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with local, state, and federal regulations. Do not contaminate water, food, or feed by storage or disposal. Do not discharge into drains, water courses, or onto the ground.

SECTION 14: TRANSPORT INFORMATION

Regulation	Information
DOT (US)	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
UN Number	None
UN Proper Shipping Name	Not regulated
Transport Hazard Class(es)	None
Packing Group	None

Regulation Information

Environmental Hazards No

Special Precautions for User None

SECTION 15: REGULATORY INFORMATION

TSCA: All components are listed on the TSCA inventory or exempt.

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

SARA 311/312 Hazard Categories:

• Immediate (Acute) Health Hazard: Yes

• Delayed (Chronic) Health Hazard: No

• Fire Hazard: No

• Reactive Hazard: No

• Sudden Release of Pressure Hazard: No

SARA 313: No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 313.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances, Priority Pollutants, or Toxic Pollutants under the CWA.

Clean Air Act: None of the chemicals in this product are listed as Hazardous Air Pollutants under the CAA.

State Right-to-Know:

- Massachusetts: None of the components are listed.
- New Jersey: None of the components are listed.
- Pennsylvania: None of the components are listed.

California Prop. 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

SDS Prepared By: AgriBio Systems Date of Preparation: June 2025 Revision Date: June 2025

Revision Number: 1.0

HMIS Ratings: Health: 1, Flammability: 0, Physical Hazard: 0, Personal Protection: B

NFPA Ratings: Health: 1, Flammability: 0, Instability: 0

Disclaimer: This SDS is prepared based on the best knowledge available and does not constitute a warranty, expressed or implied, regarding the accuracy or completeness of the data. Users are responsible for ensuring the suitability of the product for their specific applications. This 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.

SDS Availability: This SDS and others can be obtained by contacting AgriBio Systems at the phone number or email listed in Section 1.