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# **USER INFORMATION GUIDE**

## A Microbial-Nutrient Synergy for Regenerative Agriculture

## What is BioSource™?

**BioSource™** is a multi-functional microbial nutrient complex designed to improve **soil** health and fertility, stimulate microbial diversity, and enhance plant vigor. Formulated with high-potency beneficial microbes, prebiotics, and natural bio-stimulants, BioSource™ works at the root-soil-microbe interface to unlock nutrient potential, support resilient and productive ecosystems, and promote the development of nutrient-rich crops. In addition to enhancing biological activity, BioSourc actively contributes to the detoxification and restoration of contaminated soils, accelerating the breakdown of harmful residues and supporting long-term soil regeneration.

# **Key Benefits**

- **√**
- Detoxifies glyphosate and other soil contaminants
- ✓ Enhances nutrient cycling and organic matter breakdown
- ✓ Increases root mass and nutrient uptake efficiency
- ✓ Supports soil microbiome restoration and health
- Promotes crop yield and quality improvements
- ✓ Stimulates compost and organic matter decomposition
- Compatible with regenerative, organic, and conventional systems

# **Core Ingredients**

BioSource™ harnesses the power of a proprietary dual-action system combining MicroShield™-18, a concentrated matrix of beneficial microbes, with NutriCarrier™, a tailored complex of organic activators and plant-supporting compounds. Together, these two synergistic platforms form the core of the product's performance. MicroShield-18 delivers a broad-spectrum blend of biologically active strains selected for their ability to improve nutrient cycling, stimulate soil vitality, and restore ecological balance. NutriGuard complements this by supplying targeted nutritional support—organic catalysts, carbon



sources, and natural growth enhancers—that feed microbial communities and enhance plant vigor under diverse field conditions.

# **Application Methods**

Application of BioSource is flexible and adaptable to a wide range of farming systems, including broad-acre agriculture, home gardens, greenhouse crops, composting operations, and even soilless or hydroponic setups.

- ✓ Soil drench (row crops, gardens, greenhouses)
- ✓ Foliar spray (early morning or evening for best absorption)
- Compost activation (to accelerate microbial breakdown)
- Seed treatment (as a root priming agent)

# **General Application Rates**

#### **Soil Drench**

Product Dose	Water Volume (Minimum)	Coverage Notes
15 g/acre	30-50 liters (~8-13 gal)	Light dose for maintenance or early growth stages
20 g/acre	40-60 liters (~11-16 gal)	Standard field dose
25 g/acre	50-80 liters (~13-21 gal)	Intensive dose for stressed or degraded soils

#### **Fertigation**

Application Method	Rate	Water Volume	Frequen cy	Timing	Notes
Fertigation	15-25 g/acre	1 gram per 2–5 liters of water	Every 2-4 weeks	Early or late irrigation cycle	Inject during non-peak hours. Use dechlorinated water. Flush lines before and after use. Avoid chlorinated sources. Best with drip or micro-sprinkler systems.

## **Foliar Spray**

Application Method	Rate	Water Volume	Frequency	Timing	Notes
Foliar Spray	10 g/10 L water	10-20 L/acre	Every 10–14 days	Morning or late afternoon	Spray evenly on foliage; avoid full sun, heat, and rain. Ensure full coverage without runoff. Compatible with most foliar inputs (test before tank mixing).





# **Compost Application**

Use Case	BioSource™ Rate	Frequency	Notes
Standard composting	50 g/yd³	Once or every 3-4 weeks	Apply during setup or turning
High carbon/woody mixes	75-100 g/yd³	Every 2-3 weeks	Helps accelerate breakdown
Reviving inactive piles	100 g/yd³	Every 2 weeks	For stalled, anaerobic, or compacted piles

#### **Seed Treatment**

Crop Type	BioSource™ Rate	Frequency	Notes
Small seeds (e.g., lettuce, carrot)	1 g/kg seed	Once before sowing	Use light slurry, air-dry before planting
Medium seeds (e.g., corn, tomato)	1.5-2 g/kg seed	Once before sowing	Improves germination and early root vigor
Large seeds (e.g., beans, peas)	2 g/kg seed	Once before sowing	Apply evenly; do not over- saturate

# **Optional/Advanced Application Types**

Application Method	Description	Include?
Soil Pre-Plant Conditioning	Applied 5–7 days before planting to activate soil microbes and reduce pathogens.	Optional
Root Dip / Transplant Solution	Dip bare-root transplants into diluted BioSource™ before planting for root colonization.	Useful for nurseries/greenhouses
Compost Tea / Liquid Brew	BioSource™ used as a microbial inoculant to brew compost tea. Applied as soil or foliar spray.	Optional
Hydroponics / Soilless Systems	Low-dose application in recirculating systems to support microbial balance and plant growth.	Optional if serving that market

# Instructions for Use

# Mixing:

- ✓ Blend BioSource<sup>™</sup> into clean, chlorine-free water (pH 6–7 ideal).
- ✓ Agitate gently if using spray systems or tanks.
- ✓ Use within 6–12 hours of mixing for best results.







#### Timing:

- ✓ Apply during early morning or late afternoon.
- Avoid high heat, UV exposure, or application before rainfall.

#### Storage:

- ✓ Store in a cool, dry place away from direct sunlight.
- ✓ Keep the bag sealed. Shelf life: 12–18 months.
- ✓ Do not expose mixed product to direct sunlight or extreme temperatures.
- ✓ Do not store mixed solution overnight.
- ✓ Avoid application just before rainfall or irrigation that may cause leaching.
- Always test compatibility before mixing with other liquid fertilizers or biological products.
- Store the dry product in a cool, dry, sealed container out of direct sunlight. Shelf life is typically 12 to 18 months if stored properly.

By following these best practices, users can fully harness the synergistic effects of BioSource™ to regenerate soils, support healthy crops, and build long-term agricultural resilience.

# **Product Compatibility**

- √ Safe for organic systems
- ✓ Tank-mix compatible with compost teas and molasses
- ✓ Avoid chlorinated water or synthetic biocides during application

# Safety Notes

Non-toxic and safe when used as directed. BioSource is composed of naturally occurring microbial and organic components that are generally recognized as safe for use in agricultural and horticultural settings.

Use personal protective equipment (PPE) such as gloves and a dust mask when handling the dry product, especially in enclosed or poorly ventilated areas, to avoid respiratory or skin irritation due to dust.

**Avoid contact with eyes and open wounds.** In case of contact, rinse thoroughly with clean water. If irritation persists, seek medical advice.

**Keep out of reach of children and pets.** While non-hazardous, the concentrated microbial content should not be ingested or inhaled unnecessarily.

**Do not ingest.** This product is not intended for human or animal consumption.

Wash hands thoroughly after handling the product or application equipment.

**Store in original packaging** in a cool, dry location away from direct sunlight, moisture, or volatile chemicals.

**Dispose of unused or expired product** in accordance with local agricultural or organic waste guidelines.







# Frequently Asked Questions (FAQs)

## Q: Is BioSource<sup>™</sup> safe for all crops?\*\*

A: Yes! BioSource<sup>™</sup> is broad-spectrum and safe for fruits, vegetables, grains, ornamentals, and more.

## Q: Can I use it indoors or in hydroponics?\*\*

A: Yes, BioSource<sup>™</sup> supports soilless systems; apply at lower rates and monitor biofilm or buildup.

## Q: Does it have an odor?\*\*

A: Slight natural fermentation scent due to microbial activity, but not offensive or harmful.

# Q: Can I apply it with fertilizers?\*\*

A: Absolutely. BioSource<sup>™</sup> complements both organic and low-salt chemical fertilizers.

## Q: Can I combine BioSource™ with fertilizers or other biologicals?

A: Yes. BioSource<sup>™</sup> is compatible with most organic and low-salt fertilizers, as well as compost teas and microbial blends. Always jar-test or apply separately when combining with unknown inputs.

# Q: Will BioSource<sup>™</sup> clog my sprayer or drip line?

A: No, when properly mixed. Use clean, dechlorinated water and fine mesh filters (>200 micron). Always agitate gently and flush lines after application.

## Q: Is BioSource<sup>™</sup> safe for organic farming?

A: Yes. BioSource™ contains naturally derived microbes and carriers and is suitable for use in organic systems. Please check for certification compliance in your region.

#### Q: What if I apply too much?

A: Over-application may temporarily cause microbial competition or waste of product, but it is not harmful to plants or soil. Stick to recommended rates for optimal results.

#### Does BioSource<sup>™</sup> require refrigeration?

A: No. Store in a cool, dry place out of sunlight. Avoid exposure to heat, moisture, or volatile chemicals to preserve microbial viability.

## Can I apply BioSource™ during rain or irrigation?

A: Avoid applying just before heavy rainfall or deep irrigation, as it may wash microbes below the active root zone. Apply during stable weather or time irrigation carefully.

# **Contact & Support**

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5