

## **User Guide**

## **BiOWiSH® MultiBio 3PS: Feed Mill Spray Coating Extruded and Pelleted Feed Process**

#### **BiOWiSH's Aquaculture Program**

Our aquaculture microbial management program is an essential tool to help improve aquaculture productivity and production. The program consists of five elements - pond preparation, water management, feed management, issues management, and waste handling - that can be used at any stage of production based on your unique needs to help you control your biology and control your production.











### Introduction

Please use the following instructions for spray coating BiOWiSH<sup>®</sup> MultiBio 3PS onto compound pelleted and extruded aquaculture feeds.

### **Product Description**

BiOWiSH<sup>®</sup> MultiBio 3PS is a water soluble prebiotic, probiotic, and postbiotic that works to prevent disease, aid in feed digestion, and maintain long term digestive health for all aquaculture species. It is recommended for all growth stages.



#### Product Benefits

- Improves feed attactability, resulting in an increase in the rate of feed consumption, helping to preserve feed nutrient quality and reduce waste
- Increases feed efficiency and digestibility
- Helps prevent colonization of pathogenic bacteria, improving animal gut health
- Improves fish and shrimp growth rate and biomass
- Increases survival rate
- Replaces selected antibiotics
- Improves feed consumption, reducing feed waste

What You Need

**Equipment:** Spray system with stirred container and spray nozzle, large mixer (e.g., conveying paddle mixer) **Ingredients:** BiOWiSH<sup>®</sup> MultiBio 3PS, aquaculture feed pellets, water, optional coating agent: Oil (vegetable or fish)

Process

### **Coating Process per 1 Metric Ton of Feed (See Process Flow Diagram)**



BiOWiSH<sup>®</sup> MultiBio 3PS may be coated onto aquaculture feed with or without oil.

Add the recommended amount of BiOWiSH<sup>®</sup> MultiBio 3PS (200 g/T of feed) to water. If oil coating is used, the volume of water should be 10% of the volume of oil. If oil is not used, a minimum of 2 L of water per ton of feed is recommended. Mix the BiOWiSH<sup>®</sup> MultiBio 3PS and water for at least 5 minutes prior to the next step.

## control your biology. control your production.

#### If Oil and Water Coating is Used:

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	Step 2a	Add oil, as per current recommended Feed Mill practice, to the mixing spray tank. (Oil spray rates are not altered when adding BiOWiSH® MultiBio 3PS to the process)
	Step 2b	Add the BiOWiSH <sup>®</sup> MultiBio 3PS and water mixture to the oil in the mixing spray tank and mix vigorously for an additional 15 minutes prior to use.
If Water Coating Only is Used:		
	Step 2c	Add the BiOWiSH <sup>®</sup> MultiBio 3PS and water to the mixing spray tank and mix for at least another additional 5 minutes prior to use.
	Step 3	Maintain continuous mixing of the coating mixture throughout the coating process.
	Step 4	Load feed (allow feed to cool to < 50°C prior to loading) into the conveying paddle mixer.
		Water BiOWiSH®
		2h an 2a

# **Storage and Compatibility**

2b or 2c

3

Stirred Spray

Tank

Flat fan spray nozzle

After coating, store coated feed in a cool, dry location out of direct sunlight until ready to use. Storage of BiOWiSH® MultiBio 3PS and coated feed above 40°C (104°F) for extended periods is not recommended.

Oil

2a

Pellet

4

Empty mixer

**Conveying Paddle Mixer\*** 



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**Contact us:** aquaculture@biowishtech.com +1 312 572 6700 biowishtech.com

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