

Organic Mannooligosaccharides Powder



What is Organic Mannooligosaccharides Powder?

Organic Mannooligosaccharides (MOS) is a high-performance prebiotic fiber derived from the cell walls of organic yeast (*Saccharomyces cerevisiae*) or organic plant-based sources. Unlike standard fibers that simply provide bulk, MOS acts as a sophisticated functional ingredient. It is designed to selectively promote beneficial gut bacteria while physically binding to harmful pathogens. For brands focusing on immunity, digestive health, and clean-label “gut-first” nutrition, Organic MOS is a premier choice.

Think of Organic MOS as the “security detail” for the microbiome. While other prebiotics like FOS or GOS primarily act as “food” for bacteria, MOS adds an extra layer of protection by neutralizing “bad actors” before they can colonize the intestinal wall. It is an ideal solution for vegan, non-GMO, and organic-certified supplements, functional beverages, and animal health products.

Why is Organic MOS considered a “Pathogen Blocker”?

The true power of **Organic Mannooligosaccharides** lies in its unique molecular structure. Many harmful bacteria (like *E. coli* and *Salmonella*) use mannose-specific fimbriae (hair-like hooks) to attach to the intestinal lining.

When MOS is present in the digestive tract, these pathogens mistakenly bind to the MOS molecules instead of the gut wall. Once “hooked” onto the MOS fiber, the pathogens are harmlessly flushed out of the system. This “decoy” mechanism makes Organic MOS a vital ingredient for formulations targeting travelers’ health, immunity, and overall digestive resilience.

What are the Technical Specifications of our Organic MOS?

We provide a highly purified, organic-certified grade of MOS that ensures maximum bioactivity and stability in various manufacturing environments.

Attribute	Specification Details
Common Names	Organic MOS, Mannan-oligosaccharides, Glucomannan-oligosaccharides
Source	Organic Yeast Cell Wall (<i>Saccharomyces cerevisiae</i>)
Appearance	Fine, off-white to light yellow powder
MOS Content	≥ 90% (Custom concentrations available)
Solubility	Highly soluble in water; forms a clear to slightly opaque solution
pH Stability	Stable in a range of 3.0 to 7.0
Heat Stability	Maintains integrity up to 120°C (248°F)
Dietary Suitability	Vegan, Gluten-Free, Non-GMO, Organic Certified, Paleo-Friendly

How does Organic MOS enhance functional formulations?

Organic MOS provides multiple layers of functionality that go beyond simple fiber supplementation:

- **Selective Prebiotic Effect:** It specifically encourages the growth of *Lactobacillus* and *Bifidobacterium*, helping to balance the microflora without causing the excessive bloating sometimes associated with other fibers.

- **Immune System Modulation:** MOS interacts with the gut-associated lymphoid tissue (GALT), helping to “prime” the immune system for a faster response to threats.
- **Superior Stability:** It is highly resistant to stomach acid and digestive enzymes, ensuring it reaches the lower intestine fully intact where it is needed most.
- **Flavor Profile:** It has a neutral, slightly sweet, or “yeasty” savory profile that complements protein powders, meal replacements, and functional broths perfectly.

How to Use: Practical Guidance for Formulators

Organic Mannooligosaccharides is easy to work with, but precise dosing ensures the best functional outcome:

- **In Dietary Supplements:** For capsules or tablets, a dosage of **500mg to 1,500mg per day** is standard for immune and digestive support.
- **In Functional Beverages:** Add **1g to 3g per serving**. It dissolves well in smoothies, juices, and “gut shots.” Due to its heat stability, it can also be added to hot coffee or tea.
- **In Pet and Animal Nutrition:** MOS is a superstar in organic pet food. Use at a rate of **1kg to 2kg per ton of feed** to support healthy stools and coat quality.
- **Synergy Tip:** Combine Organic MOS with **Probiotics** (like *Bacillus coagulans*) to create a powerful “synbiotic” product that both provides beneficial bacteria and protects the environment they live in.

FAQs

Q: Is Organic MOS a “FODMAP” ingredient?

A: Actually, MOS is generally better tolerated than many other oligosaccharides. Because it is not rapidly fermented in the upper small intestine, it is often a preferred choice for “gut-friendly” or low-FODMAP-style positioning compared to high doses of Inulin or FOS.

Q: Does Organic MOS contain yeast allergens?

A: While derived from yeast cell walls, the purification process removes most of the proteinaceous material that causes yeast allergies. However, we provide full specification sheets to help you determine if it meets your specific “yeast-free” or “allergen-sensitive” labeling requirements.

Q: How does the “Pathogen Binding” benefit my marketing?

A: In a B2B context, this allows you to market your product not just as “fiber,” but as “active defense.” It moves your product from a passive nutritional supplement to an active functional tool for immune and digestive resilience.

Q: Can I use Organic MOS in high-heat baking?

A: Yes. Organic MOS is incredibly heat-stable. It can survive the extrusion process for bars or the high temperatures of commercial baking without losing its prebiotic structure.

Packing

For more information, please visit our website:

<https://www.organic-way.com/products/organic-mannoooligosaccharides-powder/>