

## **Organic Xylooligosaccharides**



### What are organic Xylooligosaccharides?

**Organic Xylooligosaccharides (XOS)** are meticulously produced through a proprietary enzymatic hydrolysis process from 100% pure, organically certified plant sources, typically non-GMO corn cobs, birch, or other suitable plant fibers. This precise process breaks down xylans into short-chain xylooligosaccharides. The resulting product is then carefully purified and either dried into a fine powder or concentrated into a viscous syrup. The organic certification guarantees that the raw materials are cultivated and processed without synthetic pesticides, herbicides, GMOs, or artificial additives, aligning with strict clean-label and natural ingredient standards.

**Organic XOS** stands out among prebiotics due to its high efficiency at very low dosages (often effective at 1-2 grams per day). It acts as a highly selective fuel source, bypassing digestion in the upper gastrointestinal tract and reaching the large intestine intact, where it is preferentially fermented by beneficial *Bifidobacteria* and *Lactobacilli*.

• **Organic XOS Powder:** The purified liquid is gently dried into a fine, free-flowing powder, ideal for supplements, dry mixes, and functional foods.

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• **Organic XOS Syrup:** The concentrated liquid remains in its viscous syrup form, offering excellent solubility and moisture-retention properties, perfect for beverages, bars, and certain confectionery items.

Both forms of **Organic XOS** offer a mild, slightly sweet taste and excellent stability across various processing conditions, making them versatile for integrating into a wide array of functional products without impacting sensory profiles. Our **Organic XOS** is the ideal choice for manufacturers seeking to deliver targeted digestive health, immune support, and enhance overall product quality with a clean and transparent ingredient.

### **Specifications**

Attribute	Organic XOS Powder	Organic XOS Syrup
Common Names	Organic Xylooligosaccharides Powder, Organic XOS Powder, Organic Xylo-Oligosaccharides	Organic Xylooligosaccharides Syrup, Organic XOS Syrup, Organic Xylo-Oligosaccharides
Source	100% Organic Plant Fiber (e.g., non-GMO corn cob, birch)	100% Organic Plant Fiber (e.g., non-GMO corn cob, birch)
Processing	Enzymatic hydrolysis, purification, drying	Enzymatic hydrolysis, purification, concentration
XOS Content	Typically ≥70%, ≥95% (dry basis), or custom options	Typically ≥70% (dry basis), or custom options
Appearance	Fine, white to off-white, free-flowing powder	Clear to pale yellow, viscous
Flavor	Mild, neutral, slightly sweet	Mild, neutral, slightly sweet
Sweetness Level	Approx. 30% of Sucrose	Approx. 30% of Sucrose
Caloric Value	Approx. 2.0 kcal/g	Approx. 2.0 kcal/g (on dry basis)
Solubility	Good	Excellent, highly soluble in water

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Attribute	Organic XOS Powder	Organic XOS Syrup
Moisture Content	Max 6%	Max 30%
Brix Value	N/A (Powder)	Typically 70-75° Brix
pH (1% solution)	3.0-7.0 (stable across wide pH)	3.0-7.0 (stable across wide pH)
Microbiological Purity	Meets international food safety standards	Meets international food safety standards
Heavy Metals	Low levels, compliant with international regulations	Low levels, compliant with international regulations

#### **Key Features**

- Highly Effective Low-Dose Prebiotic: XOS is effective at much lower daily dosages (typically 1-2 grams) compared to other prebiotics like FOS or GOS, making it cost-effective and easier to incorporate without causing digestive discomfort.
- Precision Gut Microbiome Modulation: Selectively stimulates the growth of beneficial
   *Bifidobacteria* and *Lactobacilli* in the colon, leading to a balanced and diverse gut flora crucial for
   overall health.
- **Enhanced Immune Function:** A healthy gut microbiome supported by XOS contributes significantly to a robust immune system, influencing the body's natural defenses.
- **Improved Nutrient Absorption:** By promoting a healthy gut environment, XOS can indirectly support better absorption of essential nutrients.
- Mild Sweetness & Low Calorie: Offers a subtle, natural sweetness (about 30% of sucrose) with a lower caloric value, allowing for sugar reduction in formulations.
- Excellent Stability: Maintains its prebiotic efficacy across a wide range of pH levels and processing temperatures, ensuring functional benefits in diverse product matrices.
- **High Solubility:** The **syrup** form offers exceptional solubility, ideal for clear beverages, while the **powder** dissolves well for dry applications.
- Organic & Clean Label: Certified organic and non-GMO, free from synthetic pesticides, herbicides, and artificial additives, aligning with strict consumer demands for pure and transparent ingredients.

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• **Allergen-Friendly:** Naturally free from common allergens such as gluten, dairy, soy, and nuts, making it a highly inclusive ingredient.

#### **Applications**

Our **Organic Xylooligosaccharides (XOS) Powder** and **Syrup** are incredibly versatile and indemand ingredients for a multitude of B2B applications across the nutraceutical, functional food, and beverage industries:

#### **Organic XOS Powder Applications:**

- Nutraceuticals & Dietary Supplements: Primary ingredient in gut health formulas, immune support blends, weight management powders, and daily wellness supplements (capsules, tablets, powdered mixes). Ideal for low-dose, high-impact formulations.
- **Dry Mixes:** Protein powder blends, meal replacement shakes, and functional cereal blends for fiber enrichment.
- Baked Goods & Snacks: Incorporated into functional cookies, energy bars, and snack bites for
  prebiotic benefits without significant sweetness impact.

#### **Organic XOS Syrup Applications:**

- **Functional Beverages:** Preferred for ready-to-drink functional waters, prebiotic drinks, fruit juices, and fermented beverages due to its excellent solubility and neutral flavor.
- Dairy & Plant-Based Products: Yogurts, fermented milks, plant-based milks, and frozen desserts for gut health fortification.
- Liquid Supplements: As a base for liquid nutraceuticals or elixirs requiring prebiotic benefits.

### Why Choose Our Organic Xylooligosaccharides?

Partnering with us for your **Organic Xylooligosaccharides (XOS)** needs ensures a cutting-edge, high-demand ingredient that addresses critical consumer health trends:

- Leader in Precision Prebiotics: Offer a highly effective, low-dose solution for targeted gut microbiome modulation, setting your products apart.
- **Guaranteed Organic Certification:** Our XOS adheres to stringent organic standards, vital for your clean-label and premium product lines.
- Versatile Formats: Offering both powder and syrup provides maximum flexibility for your diverse product development needs, ensuring optimal functionality in various matrices.

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- **Superior Quality & Purity:** Our meticulous production processes and stringent quality control guarantee a reliable, pure, and safe product batch after batch, meeting the highest international food safety standards.
- **Robust & Scalable Supply Chain:** As a dedicated B2B supplier, we offer dependable sourcing and the capacity to meet your production demands, from small to bulk orders, efficiently and consistently.
- Comprehensive Technical Support: Our team provides detailed data sheets, Certificates of Analysis (CoAs), and expert guidance to support your product development, labeling, and regulatory compliance needs.

#### **FAQs**

# Q: How does Organic Xylooligosaccharides (XOS) differ from other prebiotics like FOS or Inulin?

A: **Organic XOS** is unique for its **high efficacy at low doses** (often 1-2g/day) and its **high selectivity** in stimulating *Bifidobacteria* and *Lactobacilli*. While FOS and Inulin are also effective prebiotics, XOS can achieve similar or superior benefits with smaller serving sizes, potentially leading to less digestive discomfort for some consumers.

## Q: Is Organic XOS stable under heat and acidic conditions for beverage applications?

A: Yes, **Organic XOS** demonstrates excellent stability across a wide range of pH levels (typically 3.0-7.0) and is highly stable under typical food processing temperatures, making it ideal for pasteurized beverages and other heat-treated products.

## Q: What's the typical shelf life and recommended storage for bulk quantities?

A: Our **Organic XOS Powder** typically has a shelf life of **24 months**, and **Organic XOS Syrup** typically has a shelf life of **12-18 months** from the manufacturing date. Both should be stored in a cool, dry place (below 75°F / 24°C), away from direct sunlight and moisture, in their original sealed, airtight packaging.

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#### Q: Is your Organic XOS produced from non-GMO sources?

A: Yes, as a certified organic product, our **Organic XOS** is inherently **Non-GMO**, as it is derived from organically cultivated plant fibers (e.g., non-GMO corn cobs, birch).

#### Q: Can Organic XOS be combined with probiotics?

A: Absolutely. **Organic XOS** is an excellent companion to probiotics, forming **synbiotic combinations**. It acts as a selective food source for probiotic strains, enhancing their survival and activity in the gut, leading to more pronounced and synergistic health benefits.

#### **Packing**



Want to learn more about this product or have any questions?

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