

## Organic Pea Fiber



### What is organic pea fiber?

Organic Pea Fiber is a functional dietary fiber ingredient derived exclusively from the hull (outer skin) of 100% organic-certified yellow peas. Through a gentle mechanical process without chemical solvents, it delivers a powerful combination of soluble and insoluble fiber in a fine, off-white to light cream-colored powder.

Unlike pea protein, which is extracted from the internal portion of the pea for its amino acid profile, pea fiber harnesses the structural matrix of the pea hull — primarily for its exceptional water-holding, oil-binding, and texture-enhancing properties.

#### Core Differentiation vs. Commodity Fiber Alternatives

Organic Pea Fiber is typically preferred over cellulose and wheat fiber for several reasons:

- **Gluten-Free:** Naturally free from gluten, making it suitable for allergen-sensitive consumers where wheat fiber is not appropriate.
- **Clean Label Appeal:** "Pea Fiber" carries a more consumer-friendly identity — aligning with whole-plant positioning — whereas "cellulose" may be perceived as wood pulp.
- **Superior Water-Holding:** Water-holding capacity of 1:5 to 1:8 significantly exceeds cellulose (1:3 to 1:4) and wheat fiber (1:4 to 1:6).
- **Organic Availability:** Certified organic and Non-GMO verified options are available from a single supply source.

#### Functional Performance

- **Water-Holding:** Each gram of fiber binds 5–8 grams of water depending on grade, reducing purge and weep while increasing finished product yield.
- **Oil-Binding:** Demonstrates significant oil-binding ability (1:3 to 1:5), maintaining perceived richness in reduced-fat formulations.
- **Thermal Stability:** Exceptional stability under high-heat conditions including baking, frying, and extrusion.
- **Neutral Flavor:** Very mild, neutral taste — significantly gentler than whole pea flour — allowing seamless integration into fiber fortification goals without compromising flavor.

## PHYSICAL & CHEMICAL PROPERTIES

### Product Specifications

Parameter	Specification	Test Method
Common Names	Organic Pea Hull Fiber, Organic Pea Cell Wall Fiber	—
Source	100% organic Non-GMO yellow peas ( <i>Pisum sativum</i> )	—
Appearance	Fine off-white to light cream-colored powder	Visual
Total Dietary Fiber	≥80% (typically 85%+)	AOAC 985.29
— Soluble Fiber	~25–30% of total	AOAC 985.29
— Insoluble Fiber	~70–75% of total	AOAC 985.29
Moisture Content	≤10%	Karl Fischer
Water-Holding Capacity	1:5 to 1:8 (grade-dependent)	AACC 56-30
Oil-Binding Capacity	1:3 to 1:5	In-house method
Particle Size	Available in 50, 80, or 100 mesh	Sieve analysis
Bulk Density	0.30–0.50 g/cm <sup>3</sup>	Tapped density
pH (10% suspension)	6.0–7.5	Potentiometric
Color (L* value)	≥80	Colorimetry
Flavor	Very mild, neutral, no beany aftertaste	Organoleptic
Solubility	Insoluble; swells in water	Visual
Shelf Life	24 months (stored properly)	—

### Product Grades

Grade	Particle Size	Water-Holding	Primary Application
<b>Standard</b>	50 mesh	1:5	Plant-based meat alternatives, visible fiber applications

Grade	ParticleSize	Water-Holding	Primary Application
<b>Fine</b>	80 mesh	1:6-1:7	Baked goods, snacks, general-purpose formulations
<b>Ultra-Fine</b>	100 mesh	1:7-1:8	Beverages, sauces, smooth-texture applications

## MICROBIOLOGICAL & CONTAMINANT STANDARDS

### Microbiological Limits

Test	Specification	Method
Total Plate Count (TPC)	≤10,000 CFU/g	ISO 4833
Yeast & Mold	≤500 CFU/g	ISO 21527
E. coli	Not detected	ISO 16649
Salmonella spp.	Not detected / 25g	ISO 6579
Staphylococcus	Not detected	ISO 6888

### Heavy Metal Limits

Metal	Specification	Method
Lead (Pb)	<0.05 mg/kg	ICP-MS
Arsenic (As)	<0.02 mg/kg	ICP-MS
Cadmium (Cd)	<0.1 mg/kg	ICP-MS
Mercury (Hg)	<0.01 mg/kg	ICP-MS

### Purity & Contaminant Standards

Test	Specification	Method
Pesticide Residues	Not detected (500+ compounds tested)	GC-MS / LC-MS/MS
Ochratoxin A	<2 ppb	ELISA / HPLC
Gluten	<10 ppm	ELISA R5 Mendez

## CERTIFICATIONS

Certification	Status	Issuing Body
USDA Organic	Available	USDA-accredited certifier
EU Organic	Available	EU-authorized control body
Non-GMO Project Verified	Available	Non-GMO Project

Certification	Status	Issuing Body
Gluten-Free	Certified	Third-party laboratory
Kosher	Certified	Orthodox Union (OU) or equivalent
Halal	Certified	IFC or equivalent
Vegan	Certified	Vegan Society or equivalent
ISO 22000	Available	BSI / SGS or equivalent
HACCP	Available	Third-party audit
GMP	Available	FDA-aligned manufacturing standards

COA, TDS, and Organic Transaction Certificate provided per batch. All certificates issued against the specific production batch.

## APPLICATIONS & USAGE GUIDELINES

### Recommended Application Sectors

Application	Typical Dosage	Format	Key Benefits
Plant-Based Meat Alternatives	1-3% of total weight	Standard (50 mesh)	Texture, juiciness, purge reduction
Bakery Products	Replace 3-5% of flour	Fine (80 mesh)	Moisture retention, shelf-life extension
Protein Powders & Meal Replacements	2-5g per serving	Ultra-Fine (100 mesh)	Fiber enrichment, digestive health claims
Pet Food (Premium Organic)	1-3%	Standard / Fine	Gut motility, weight management
Sauces, Dressings & Condiments	0.5-2%	Ultra-Fine (pre-hydrated)	Thickening, emulsion stability
Breakfast Cereals	3-8%	Fine (80 mesh)	Fiber fortification, texture
Extruded Snack Foods	1-3%	Fine / Ultra-Fine	Crispness, fiber claim support
Confectionery	1-3%	Fine (80 mesh)	Moisture management, texture

### Formulation Notes

**Pre-Hydration:** Always pre-hydrate pea fiber in water (1:5 to 1:8 ratio) before incorporating into dry systems. Add hydrated fiber early in the mixing process to ensure even distribution.

**Water Adjustment:** When replacing flour with pea fiber in baking, increase total water content by 10-15% to compensate for fiber's water absorption.

## Mesh Selection:

- 50 mesh (Standard): Visible-texture applications — granola, meat analogs
- 80 mesh (Fine): General-purpose — baked goods, snacks
- 100 mesh (Ultra-Fine): Smooth-texture — beverages, sauces

**pH Stability:** Pea fiber is stable across a wide pH range (3.5–8.0), making it suitable for acidic applications including fruit-based formats and carbonated beverages.

**Heat Processing:** No special handling required for standard heat processes; maintains functionality through baking, extrusion, and retort.

**Oil-Binding in Reduced-Fat Formulations:** The fiber matrix helps maintain the perception of richness and succulence when fat content is reduced, supporting clean-label positioning in better-for-you product categories.

## FAQ

### Q: Is Organic Pea Fiber the same as Organic Pea Protein?

**A:** No. Pea protein is extracted from the interior of the pea and is valued for its amino acid profile — particularly its lysine content. Pea fiber is derived primarily from the pea hull (outer skin) and is valued for its high dietary fiber content ( $\geq 80\%$ ) and functional properties (water-holding, oil-binding, texture enhancement). They serve entirely different formulation purposes.

### Q: Does it have a strong pea or beany flavor?

**A:** No. Through ORGANICWAY's gentle mechanical processing, Organic Pea Fiber develops a very mild, neutral flavor profile that is significantly gentler than whole pea flour. It integrates seamlessly into delicate applications ranging from white bread to vanilla-flavored protein shakes without introducing off-flavors.

### Q: Is this suitable for ketogenic or low-carbohydrate diets?

**A:** Yes. Because Organic Pea Fiber consists almost entirely of insoluble fiber with zero net digestible carbohydrates and minimal calories, it is well-suited for keto-certified products. It is a popular fiber fortification ingredient in keto breads, tortillas, and snack formats where consumers seek to reduce net carbohydrate intake while increasing dietary fiber.

### Q: How does it compare to cellulose or wheat fiber?

**A:** Organic Pea Fiber is typically preferred over cellulose and wheat fiber for several reasons: (1) It is naturally gluten-free, making it suitable for allergen-sensitive consumers where wheat fiber is not; (2) It carries a more consumer-friendly clean-label identity — "pea fiber" aligns with whole-plant positioning whereas "cellulose" may be perceived as wood pulp; (3) It offers superior water-holding capacity (1:5 to 1:8 vs. 1:3 to 1:4 for cellulose); (4) Organic and Non-GMO verified options are available from a single supply source.

**Q: Is Organic Pea Fiber safe for pets?**

**A:** Yes. Pea fiber is approved for use in companion animal nutrition. It supports healthy gut motility, stool quality, and weight management in dogs and cats. ORGANICWAY's organic and Non-GMO verified product is particularly suitable for premium organic pet food formulations where clean-label positioning is valued.

**Q: What are the minimum order quantity and lead time?**

**A:** The minimum order quantity is 25 kg. Standard lead time is 10–20 days from order confirmation. Samples are available and can be shipped via FedEx, UPS, or EMS. Ports of departure: Qingdao or Tianjin, China.

**Q: What certifications are available with this product?**

**A:** Organic Pea Fiber is available with USDA Organic, EU Organic, Non-GMO Project Verified, Gluten-Free, Kosher, Halal, Vegan, ISO 22000, HACCP, and GMP certifications. Specific certificate numbers and batch-specific COA are provided with each shipment.

**Q: Are custom formulations or particle sizes available?**

**A:** Yes. ORGANICWAY offers customization options including particle size (50, 80, or 100 mesh), water-holding capacity grades, and packaging configurations. Contact the sales team to discuss custom requirements.

## **PACKAGING & STORAGE**



## Packaging Options

Package Size	Format	Packaging Material	MOQ
25 kg	Powder	Multi-ply kraft paper bag with inner liner	Standard
Custom	Powder	Bulk tote / custom specification	Commercial

All packaging materials comply with EU 10/2011 and FDA 21 CFR food-contact regulations.  
Custom packaging available for contracted supply programs.

## Pallet Configuration

Item	Specification
Bags per Pallet	40
Pallet Dimensions	77 × 44 × 20 cm
Gross Weight per Pallet	~1,040 kg

## Storage Conditions

- **Storage temperature:** ≤25°C (cool, dry environment)
- **Relative humidity:** ≤60% RH
- **Avoid:** Moisture, humidity, strong odors, direct sunlight
- **Shelf life:** 24 months from manufacturing date (sealed, unopened)
- **After opening:** Reseal tightly; consume within 6 months

For more information, please visit our website:

<https://www.organic-way.com/products/organic-pea-fiber/>