

Product Name:	Freeze Dried Banana Blossom / Bloom	Product Code:	PI-FDBB-001
Botanical Name:	Musa acuminata / Musa balbisiana	Origin:	Tamil Nadu & Andhra Pradesh, India
Manufacturer:	Passaro International	Quality Grade:	100% Food Grade / Commercial Export

1. PRODUCT DESCRIPTION

Freeze Dried Banana Blossom is produced from fresh, sound, and clean inflorescences of the banana plant (*Musa spp.*). The raw material undergoes rigorous manual sorting, destemming, natural anti-browning pre-treatment, rapid blast freezing at -40°C, and industrial vacuum lyophilization (sublimation). The advanced low-temperature process preserves the natural multi-layered fibrous matrix, color, neutral flavor profile, and exceptional rehydration yield without thermal degradation or synthetic chemical additives.

2. INTENDED USE & APPLICATIONS

- Primary Application:** Clean-label, whole-food plant-based seafood alternative (mock fish fillets, fish fingers, vegan crab cakes, shredded seafood bases).
- Secondary Application:** High-fiber dietary ingredient, ethnic ready-to-eat (RTE) meal formulations, and functional food premixes.

3. SENSORY & PHYSICAL SPECIFICATIONS

PARAMETER	SPECIFICATION STANDARD	TEST METHOD
Appearance	Clean, flaky fibrous strips / shreds	Visual
Color	Natural light cream to pale off-white	Visual
Flavor & Odor	Neutral, mild natural profile; free from off-odors	Organoleptic
Texture (Rehydrated)	Soft, fibrous, layered, and flaky	Organoleptic
Foreign Matter	Nil (Free from extraneous organic/inorganic matter)	Visual

4. TECHNICAL & CHEMICAL PARAMETERS

TEST PARAMETER	LIMIT / SPECIFICATION	TEST METHOD
Moisture Content	≤ 3.50%	Loss on Drying (105°C)
Water Activity (a _w)	≤ 0.30	Dew Point Hygrometer
Rehydration Ratio (w/w)	1 : 8 to 1 : 10	Gravimetric (Hot Water @ 80°C)
Rehydration Time	3 to 5 minutes	In-house Dissolution Method
Bulk Density	0.08 – 0.15 g/cm³	Volumetric Cylinder
Total Ash	≤ 6.00%	Gravimetric (Muffle @ 550°C)

TEST PARAMETER	LIMIT / SPECIFICATION	TEST METHOD
Acid Insoluble Ash	≤ 0.50%	Gravimetric Method
Sulfur Dioxide (SO ₂)	Absent / Non-detectable	Monier-Williams Method

5. MICROBIOLOGICAL SPECIFICATIONS

TEST PARAMETER	STANDARD LIMIT	REFERENCE METHOD
Total Plate Count (TPC)	< 10,000 CFU/g	ISO 4833-1
Yeast & Mold	< 100 CFU/g	ISO 21527-2
Enterobacteriaceae	< 10 CFU/g	ISO 21528-2
Escherichia coli	< 10 CFU/g	ISO 16649-2
Salmonella spp.	Absent in 25 g	ISO 6579
Staphylococcus aureus	Absent in 25 g	ISO 6888-1

6. NUTRITIONAL INFORMATION (TYPICAL VALUES PER 100G DRY WEIGHT)

ENERGY / NUTRIENT PARAMETER	TYPICAL VALUE PER 100G
Energy	285 – 310 kcal
Total Carbohydrates	62.0 – 68.0 g
Dietary Fiber	32.0 – 38.0 g
Protein	12.0 – 15.0 g
Total Fat	1.2 – 1.8 g
Saturated Fat	< 0.4 g
Sodium	45 – 65 mg
Potassium	1,800 – 2,200 mg

7. PACKAGING & STORAGE SPECIFICATIONS

- **Primary Packaging:** Heavy-duty, 5-layer food-grade aluminum foil barrier bags (vacuum-sealed with Nitrogen flushing).
- **Secondary Packaging:** 5-ply corrugated export master cartons / Fiber drums.
- **Standard Pack Sizes:** 5.0 kg net / 10.0 kg net per carton (or custom B2B configurations).
- **Shelf Life:** 24 Months from the date of production when unopened.
- **Storage Conditions:** Store in cool, dry conditions (≤ 25°C and relative humidity < 60%). Keep away from direct sunlight, moisture, and strong external odors.

8. ALLERGEN & COMPLIANCE DECLARATION

- **Allergen Statement:** Free from major allergens (Gluten-free, Soy-free, Nut-free, Dairy-free, Crustacean-free).
- **GMO Status:** 100% Non-GMO.
- **Radiation / Irradiation:** Product is not irradiated.
- **Preservatives:** 100% Additive-free, Sulfite-free, and Chemical-free.

- **Regulatory Compliance:** Processed under HACCP & ISO 22000 certified facilities. Compliant with US FDA and EU food safety standards. APEDA and DPPQS export compliant.

Manufacturer & Export Contact Details

Passaro International

87, Babu Nagar III Main Road, Medavakkam,
Chennai – 600100, Tamil Nadu, India

Email: sales@passarotrading.com

Phone / WhatsApp: +91 9962 002500

Web: www.passarotrading.com