

Allulose Sweetener



Discover a next-generation sweetening solution with our allulose, offered in both ultra-fine powder and liquid syrup formats. Designed for food and beverage innovators seeking a natural, low-calorie alternative to sugar that delivers functionality without compromise.

Allulose mimics the taste, texture, and performance of sucrose—but with minimal caloric contribution and no effect on blood glucose. Sourced from plant materials and processed under strict quality controls, our allulose meets global standards for purity, safety, and sustainability.

What is allulose sweetener?

Allulose (D-psicose) is a rare monosaccharide naturally present in small amounts in dried fruits like figs and raisins. Our allulose is enzymatically derived from corn or other non-GMO, feedstocks.

It provides approximately 70% of the sweetness of table sugar, with only 0.2–0.4 calories per gram. Critically, it is not metabolized by the body—making it suitable for ketogenic diets, diabetes

management, and clean-label formulations.

Product Formats

Allulose Powder

A free-flowing, white crystalline powder with high solubility and excellent thermal stability. Ideal for dry blends, baking mixes, confectionery, tabletop sweeteners, and nutritional supplements. Its fine particle size ensures uniform dispersion and consistent sweetness.

Allulose Syrup

A clear to slightly amber viscous liquid containing 70–85% allulose solids. Offers humectant properties that improve moisture retention, texture, and shelf life in liquid and semi-solid systems. Perfect for beverages, dairy alternatives, sauces, frozen desserts, and ready-to-drink formulations.

Specifications

Parameter	Allulose Powder	Allulose Syrup (Typical)
Appearance	White crystalline powder	Clear to light amber viscous liquid
Allulose Content (Assay)	≥99.0% (dry basis)	70–85% solids
Moisture Content	≤1.0%	15–30%
pH (10% aqueous solution)	5.0 – 7.0	5.5 – 6.5
Specific Rotation	-3.0° to -5.0°	-3.0° to -5.0°
Caloric Value	0.2 – 0.4 kcal/g	0.3 – 0.5 kcal/g
Solubility	Fully soluble in water	Miscible with water
Shelf Life	24 months (stored sealed, cool, dry)	18 months (stored sealed, cool, dry)

Parameter	Allulose Powder	Allulose Syrup (Typical)
Heavy Metals (Maximum Limits)		
- Lead (Pb)	≤0.1 mg/kg	≤0.1 mg/kg
- Arsenic (As)	≤0.1 mg/kg	≤0.1 mg/kg
- Cadmium (Cd)	≤0.05 mg/kg	≤0.05 mg/kg
- Mercury (Hg)	≤0.01 mg/kg	≤0.01 mg/kg
Microbiological Criteria		
- Total Plate Count	≤1,000 CFU/g	≤1,000 CFU/g
- Yeast & Mold	≤100 CFU/g	≤100 CFU/g
- <i>Escherichia coli</i>	Absent in 10 g	Absent in 10 g
- <i>Salmonella</i> spp.	Absent in 25 g	Absent in 25 g
- <i>Listeria monocytogenes</i>	Absent in 25 g	Absent in 25 g

Applications

Our allulose is engineered for versatility across multiple sectors:

- **Bakery & Confectionery:** Enhances browning (Maillard reaction), improves softness, and reduces crystallization.
- **Beverages:** Provides clean sweetness in carbonated drinks, teas, functional waters, and RTDs without aftertaste.
- **Dairy & Alternatives:** Stabilizes ice cream texture and boosts mouthfeel in plant-based yogurts and milks.
- **Nutraceuticals:** Serves as a palatable carrier in chewables, powders, and syrups.
- **Sauces & Dressings:** Adds subtle sweetness while improving viscosity and shelf stability.

Why Partner With Us?

We specialize in high-purity, sustainably sourced allulose tailored to industrial and commercial needs. From R&D support and regulatory documentation to flexible packaging (1 kg to 1 MT bulk totes), we ensure seamless integration into your production workflow.

All batches undergo rigorous third-party testing for identity, purity, heavy metals, and microbial safety. Full traceability from raw material to finished product is maintained under ISO-compliant quality management systems.

FAQs

Q: What is the caloric value and sweetness level of Allulose compared to sugar?

A: **Allulose** provides approximately 0.2-0.4 kcal/g, significantly lower than sucrose (4 kcal/g). Its sweetness is around 70% that of sucrose, allowing for direct replacement with minimal taste compromise.

Q: Is Allulose suitable for keto-friendly and diabetic products?

A: Yes, **Allulose** has a negligible impact on blood glucose and insulin levels, making it highly suitable for both keto-friendly and diabetic-friendly food and beverage formulations.

Q: What are the main functional differences between Allulose Powder and Syrup?

A: **Allulose Powder** is ideal for dry mixes, baking, and applications where precise weight measurement and moisture control are critical. **Allulose Syrup** is excellent for liquid applications, providing ease of blending, humectant properties, and contributing to moisture and texture in baked goods.

Q: Does Allulose have an aftertaste?

A: One of the key advantages of **Allulose** is its clean taste profile. It generally does not leave the cooling sensation or bitter aftertaste commonly associated with many artificial or high-intensity sweeteners.

Q: What is the shelf life and recommended storage for bulk quantities?

A: Our **Allulose** (both forms) typically has a shelf life of 24 months from the manufacturing date when stored in a cool, dry place, away from direct sunlight and moisture, in its original sealed packaging. Specific bulk storage recommendations will be provided with your order documentation.

Q: Is Allulose considered a sugar alcohol or an artificial sweetener?

A: No, **Allulose** is classified as a "rare sugar" or "novel sugar," a naturally occurring monosaccharide. It is not a sugar alcohol and is distinct from artificial sweeteners.

Packing

For more information, please visit our website:

<https://www.bio-starch.com/products/allulose-sweetener/>