Made with 100% konjac powder

Magic Mannan

Brand New Concept

Gelatinization
FREE | No coagulant needed

Key Point.1 FREE | No coagulant needed

Magic Mannan turns into gel by dissolving in water or various solvents and kneading. Because it doesn't need a coagulant, the gel neither have alkaline smell nor needs to be labeled as containing a coagulant.

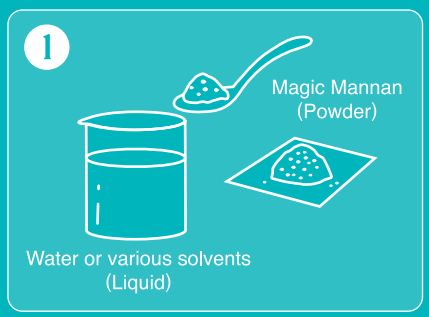
Key Point.2 STRONG | Against heating

The gel made by Magic Mannan doesn't melt and its gel strength is maintained even during and after heating process. Also recommended for use in products that require reheating.

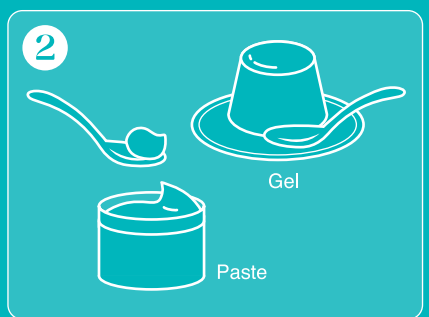
Key Point.3 FLEXIBLE | Uses

Magic Mannan can be used regardless of acidity, neutrality or alkalinity. Because it is tasteless and odorless, it goes well with various ingredients' flavors.

Just dissolve it in liquid and knead it



Gelatinization



How to Use

Amount to Dissolve

Add the product to the solvent at a ratio of roughly 0.1% to 5% of the amount of liquid you will use. Mix it until precipitation is disappeared. Adjust the concentration according to the preferred texture.

Steps after Dissolving

- After dissolving the product, let the mixture sit for some time (ideally for at least 30 min.).* *This is to secure swelling time
- After letting the resulting mixture sit, knead it fully (until the looks change from translucent state to white color.).

A Note on Heating

The product is usable across a wide range of temperatures, from refrigeration to boiling or retort conditions.

Ideal Usage Amounts

Paste: 0.7-1.0%　　Gel: 2.0-3.0%

Usage Example

Soybean Meat Hamburger Steak

Use Magic Mannan to meet needs such as improving consistency (binding properties), adding moistness, softness and/or juiciness (improved texture), and facilitating improved yield. Let it work to your benefit in a wide range of uses.

Reference Data

Swelling Speed

Magic Mannan shows swelling roughly 5 min. after being dissolved. From roughly the 15-min. mark after that, its gel stabilization can be verified. (Chart 1)

*Measurement conditions: Water solvent that has a sample concentration of 3%; heating performed at 96°C. Fragment strength measurement performed with an ambient temperature of 25°C.

Heating Temperature/Time

Stable gel strength can be preserved without melting even after being heated for long times. (Chart 2,3)

*Measurement conditions: Water solvent that has a sample concentration of 3%, heating performed at various temperatures for each time. Fragment strength measurement performed with an ambient temperature of 25°C.

Effects of pH, glucose, sodium, etc.

- Gelatinization occurs regardless of pH value. (In acidification, somewhat weak results). (Chart 4)
  *Measurement conditions: Water solvent that has a sample concentration of 3%, heating performed at 96°C for 60 min. Fragment strength measurement performed with an ambient temperature of 25°C.
- Gelatinization is possible even with the effects of glucose[1], sodium[2], etc.
  1) Large sugar content (30% or higher, etc.) will inhibit the swelling of the powder.
  2) Under conditions with the presence of sodium content, gelatinization tends to become stronger.

Chart 1 : Swelling Speed

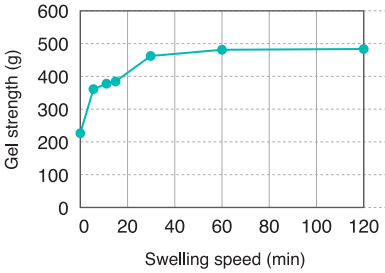


Chart 2 : According to Heating Temperature

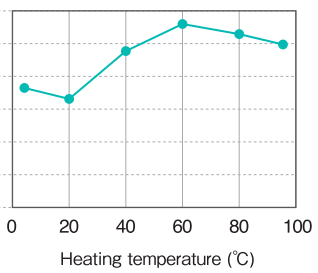


Chart 3 : According to Heating Time

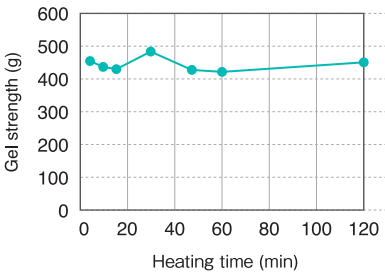
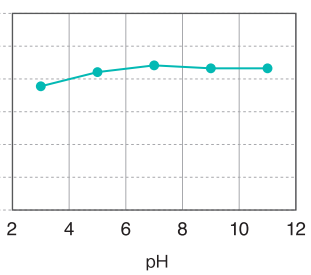


Chart 4 : According to pH



Precautions upon Use

- As this is a raw ingredient for processing, do not directly ingest it.
- This product contains fine particles. As such, it may clump upon dissolving. Add the product little by little while mixing the solvent. Dissolving at room temperature is possible.
- Upon dissolving, the product may separate into two layers when the concentration is low (under 0.7%, etc.).
- Swelling times are affected by the pH value, glucose, sodium, milk components, etc. of the solvent. Adjust swelling times as necessary. Note that securing sufficient swelling time and letting the mixture sit in a refrigerator for roughly one night will result in smoother gel.
- The texture and qualities of gel will change depending on kneading times, methods, etc.
- This powder cannot demonstrate its performance when in egg mixture due to swelling being blocked. When using eggs, etc., mix the product after swelling it with another solvent.
- When using the product in desserts, etc., a large sugar content may block the swelling of the powder. Mixing the product after swelling is recommended when using a large sugar content.
- Refrain from mixing using sharp blades such as those in a food processor. This may destroy the gel.

Product Attributes/Labeling Examples

Ingredients:	100% konjac powder (produced in Gunma Pref.)
Properties:	White powder
pH Value:	5-7
Example of label display by purpose of use in Japan:	(Ingredients) Konjac powder (Food additives) Glucomannan
Important points to note:	Please use it in accordance with the laws and regulations of your country/region.
Reference information:	Glucomannan(E425)
Allergy Labeling:	N/A