



## Gelling agent blend for plant based food, **KIMICA ALGIN M429S**

Using seaweed derived dietary fiber “Alginates”, plant materials can be bound easily

Wide range of applications

Heating / cooling not required

Sustainable material

**What is Alginate?**··· Produced from seaweed; widely used as a thickening and gelling agent in food products. KIMICA’s alginate is a sustainable material, produced from naturally dried cast seaweed.

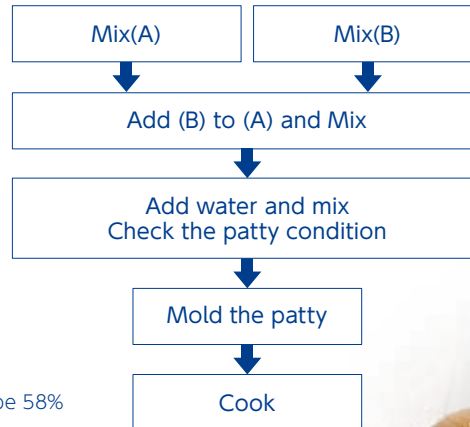
# How to make a plant based burger patty using KIMICA ALGIN M429S

KIMICA ALGIN M429S can be gelled by just adding water and kneading to bind the vegetable protein.

## Ingredients (2 patties)

- A**
- KIMICA ALGIN M429S ..... 2.4g
  - Powdered Seasoning ..... 2.0g  
(Salt, Sugar, Spices...etc)
- B**
- Granulated Soy Protein ..... 150g  
(after swelling)
  - Vegetable Oil ..... 7g
  - Others ..... 9g  
(Onion, Soy Sauce, Grated Garlic etc...)
- Water ..... 30g

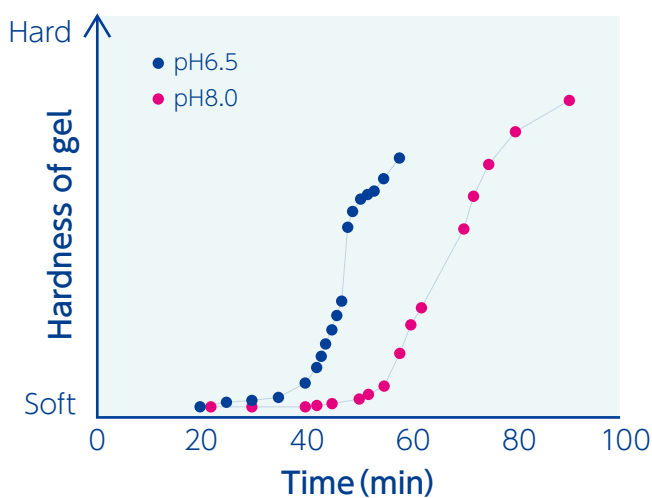
## Procedure



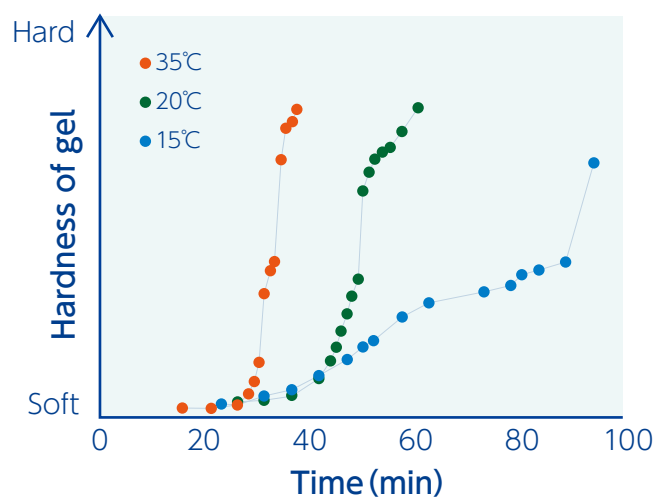
\*The recommended water content of the patties should be 58% to 65%.  
The water content can be adjusted by adding water to the granulated soy protein.  
\*After molding, resting will make the patties easier to handle.

## Gelation time of patty controlled by pH and/or temperature

Effect of pH on gelation



Effect of temperature on gelation



\*Gelation rate is affected by pH of patty and/or temperature of the processing conditions.

\*Gelation starts immediately after water is added and long production times may adversely affect the moldability of the patty.