KIMICA ALGIN
Calcium Alginate

Water content of approx. **90%**

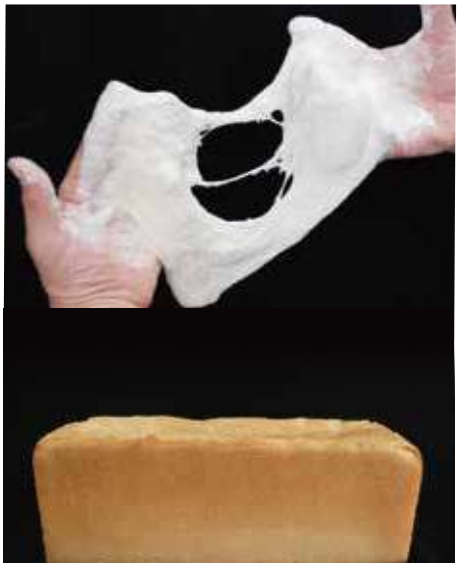
Multihydrous bread

Calcium alginate to achieve fluffy and well-shaped bread with raised water content

Calcium alginate, a natural dietary fiber found in seaweed, holds plenty of water in bread dough. Not showing too much viscosity even when holding water, calcium alginate allows bread dough to have higher water content without inteferring with its workability. Multihydrous bread with calcium alginate can be shaped easily by a machine and rises well.

Rise well, not become sticky even with water content of 90%.

Without Calcium Alginate



With Calcium Alginate

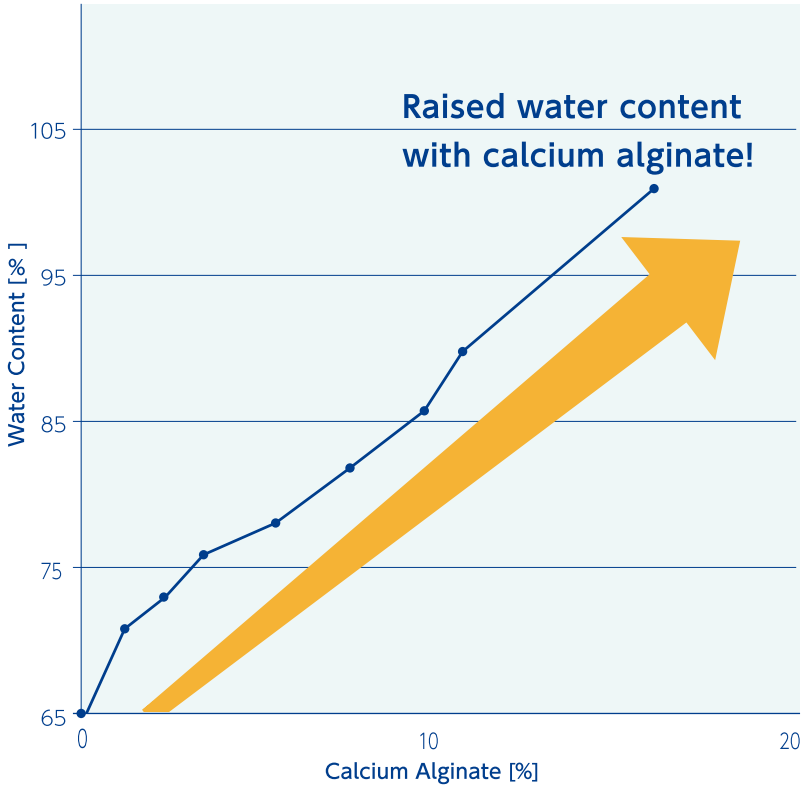
Enhanced workability

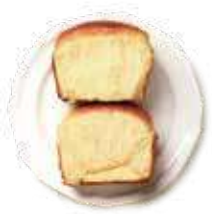
Control stickiness of bread dough to enhance its workability

Volume

Achieve the same volume even with raised water content

Water content of bread





1% addition against flour of calcium alginate allows to raise water content by 1-2%. Adjust amount of calcium alginate depending on water content intended to be raised.

Recipe

Intermediate dough preparation

Hard flour	70%
Yeast	2%
Vitamin C blend	0.1%
Water	40%

[Work process]

Mixing: 1 min at low speed and 2 min at middle speed
Fermentation: 4 hours at 28℃

Main kneading

Hard flour	30%
Salt	2%
Sugar	5%
Powdered skim milk	2%
Shortening	5%
Water	46%
Calcium Alginate	9%

[Work process]

Mixing: 1 min at low speed, 4 min at middle speed, 1 min at high speed, add shortening, 1 min at low speed, 3 min at middle speed and 2 min at high speed
Primary fermentation: 20 min at 28℃
Bench time: 20 min at 28℃
Final fermentation: 60 min
Baking: 31 min at 200℃ (Upper & lower fire)

<Patent pending>
Additive for multihydrous bread, dough for multihydrous bread, manufacturing method of dough for multihydrous bread, and manufacturing method of multihydrous bread (Patent Application No. 2021-010980)

KIMICA Marine Biopolymers Alginate
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