

CAVAMAX® W6 – DIETARY FIBER FOR SALAD DRESSINGS AND MAYONNAISE

Description

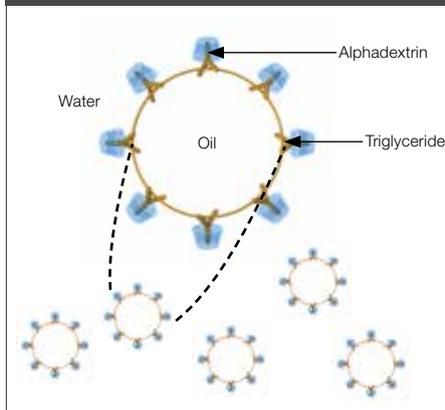
Mayonnaise and dressings are oil-in-water emulsions that require the use of an emulsifier. In normal mayonnaise preparations and salad dressings, egg yolk is used for this purpose. CAVAMAX® W6 alphasdextrin represents a cholesterol-free, vegetarian alternative for either completely or partially replacing egg yolk or other emulsifiers in mayonnaise and dressing applications.

Functional Properties

CAVAMAX® W6 is a naturally occurring, soluble dietary fiber, enzymatically derived from starch. It forms stable oil-in-water emulsions by interacting with fatty acids from triglycerides. The resulting triglyceride CAVAMAX® W6 structure efficiently stabilizes oil-in-water emulsions at low dosages. CAVAMAX® W6 can easily be combined with common stabilizing hydrocolloids, such as xanthan or guar gum and starches.



CAVAMAX® W6 – Stabilization of Oil-in-Water Emulsions



Oil-in-water emulsions can be stabilized by adding CAVAMAX® W6 alphasdextrin.

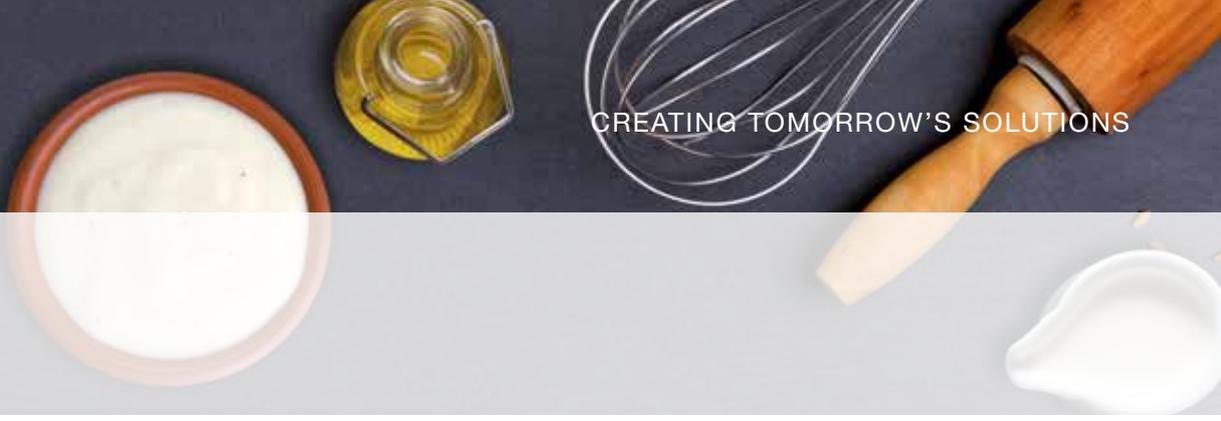
CAVAMAX® W6 – Key Benefits in Mayonnaise and Dressing Applications

- Emulsifying dietary fiber
- 100% vegetarian-grade
- Cholesterol-free
- Excellent heat, acid and shear stability
- No E number
- Non-allergenic
- Excellent mouthfeel and texture

Sample Formulations for Mayonnaise and Salad Dressing

	Mayonnaise			Salad Dressing
	30%	50%	70%	20%
Canola oil	30	50	70	20
Sugar	4.0	4.0	1.9	4.0
White vinegar, 10%	3.5	3.0	2.5	5.0
Modified starch	2.5	1.6	0.0	1.5
CAVAMAX® W6	2.5	1.6	1.0	1.5
Salt	1.0	1.0	0.7	1.0
Mustard	1.0	1.0	1.0	2.0
Xanthan	0.1	0.1	0.1	0.2
Guar gum	0.1	0.1	0.1	0.2
Potassium sorbate	0.1	0.1	0.1	0.1

Add water to 100%



Mayonnaise preparation with 1.6% CAVAMAX® W6 and 50% canola oil (%w/w).

Procedure

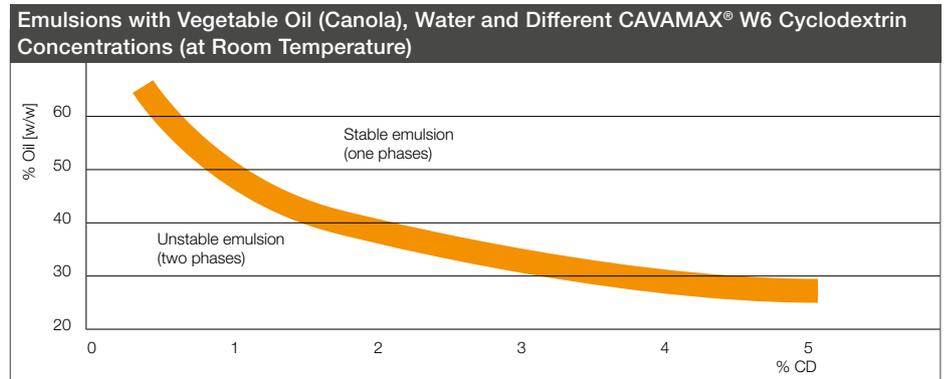
1. Mix CAVAMAX® W6, salt, sugar (and if part of the recipe, modified starch, xanthan, guar gum), potassium sorbate and water to obtain a homogeneous solution (using a Silverson, 30 sec. / 5,000 rpm).
2. Add vinegar and mustard/spices to the water phase and mix.
3. Add oil slowly to the water phase under continuous mixing (using a Silverson, 4 min. / 5,000 rpm).

Formulation Flexibility

Emulsions prepared with CAVAMAX® W6 are very stable over a temperature range of +4 to +40 °C. Excellent shear stability and mouthfeel are other characteristics of mayonnaise prepared with CAVAMAX® W6.

The mouthfeel can be adjusted in several ways:

1. Stable emulsions can be prepared over a large range of oil concentrations (see graph).
2. In preparations with increasing oil content, less CAVAMAX® W6 is needed to achieve the same viscosity.
3. Decreasing the pH of a preparation can reduce its viscosity.



What Can CAVAMAX® W6 Do for You?

WACKER CAVAMAX® W6 gives you a vegetarian-grade, cholesterol-free and non-allergenic solution for your mayonnaise and dressing preparations. This dietary fiber will not impart any taste to the product does not require an E number.

Your emulsions made with CAVAMAX® W6 will have an excellent mouthfeel and exhibit very good heat and shear stability. CAVAMAX® W6 – the emulsifying dietary fiber ideally suited to your mayonnaise and dressing preparations.



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