

5519 Ayon Ave, Irwindale CA 91706

Phone 626 969-5700 | info@nationalstabilizers.com | www.nationalstabilizers.com

Good Sensations Icing & Meringue Topping Stabilizer Product Bulletin

How does Good Sensations Meringue Topping Stabilizer work to improve toppings, icing and glazes

Good Sensations Icing and Meringue Topping Stabilizer is a blend of modified food starch, guar gum, locust bean gum, cellulose gum, agar.

Okay, let's break down how this blend of ingredients works to stabilize a meringue topping made with egg whites:
The Challenge with Meringues:

Meringue topping, made by whipping air into egg whites, are naturally delicate and prone to weeping (liquid separation) and deflation over time. This is because the structure formed by the egg white proteins isn't inherently very stable. This blend of stabilizers helps address these issues.

How Each Stabilizer Works:

1. Modified Food Starch:
 - Thickening: Modified food starch helps thicken the liquid portion of the meringue (from the egg whites and sugar), giving it more body.
 - Water Binding: It can bind some of the free water in the meringue, reducing the likelihood of weeping.
 - Stabilization: By thickening the meringue, it can indirectly contribute to stabilizing the foam structure.
2. Guar Gum:
 - Viscosity Increase: Guar gum significantly increases the viscosity (thickness) of the meringue, making it more resistant to collapse and liquid separation.
 - Foam Stability: It can help stabilize the air bubbles within the meringue, making the foam structure more robust.
3. Locust Bean Gum:
 - Synergistic Interaction: Locust bean gum often works well with guar gum; when used together, they can create a stronger gel network than either would alone, [according to ScienceDirect.com](http://www.sciencedirect.com).
 - Water Binding: It also helps to bind water, further contributing to the prevention of weeping.
4. Cellulose Gum:
 - Stabilizing Proteins: Cellulose gum can help stabilize the egg white proteins and prevent them from denaturing (breaking down), which can lead to meringue collapse.
 - Water Binding: Like other gums, it contributes to water binding, reducing weeping.
5. Agar:
 - Gel Formation: Agar, especially when heated and then cooled, can help to form a gel network within the meringue.
 - Structure Reinforcement: This gel network reinforces the meringue's structure, making it firmer and less likely to deflate or weep.
 - Stabilization over time: Agar can help a meringue retain its structure and shape for longer periods.

How They Work Together:

This blend of stabilizers creates a multi-layered approach to meringue stabilization. The starches thicken the meringue and bind water, the gums increase viscosity and foam stability, and the agar provides a structural gel network. This combination provides a more resilient meringue that's less likely to break down or weep, and it can also provide a smoother texture and better mouthfeel.

Recipe for Meringue Topping

Place in mixing bowl:

1. 1 qt egg whites and 4 oz sugar. Whip together on medium speed.
2. Bring to a boil, the following
2.5 lbs sugar, 1.5 qts water, 2.5 oz NSI Meringue topping stabilizer
Adjust amount of Stabilizer according to degree of firmness desired.
3. Thread the boiled mix, without cooling, into beaten egg whites and whip to proper consistency on medium speed.

Recipe for Meringue Glaze

4 oz Meringue stabilizer

5 lbs Sugar

8 lbs Water

½ oz Salt

Blend Stabilizer with sugar and salt.

Add water and bring to a boil.

Glaze may be colored and flavored to suit taste.

Specification

PHYSICAL/ORGANOLEPTIC

Form: Powder

Color: White

Odor: No Odor

Flavor: Bland

Chemical

Parameter	Min	Max	Units
Viscosity (3.0%) (RV@100rpm,25°C)	400	800	CPS
pH (3.0%)	6.0	8.0	pH
Brix (3.0%)	1.0	1.5	°Bx

Microbiological

Parameter	Specification (Max)
Standard Plate Count	10,000 /g
Mold and Yeast	100 /g
Coliform	10 /g
Salmonella	Negative

Packaging

A. Packed in multi-wall fiber drums with poly-lined bags, cardboard boxes with poly liner bags.

B. Outside of containers to be labeled with:

1. Product name
2. Lot number
3. National Stabilizers' name and address
4. Net contents/weight
5. Ingredient Statement
6. Only if applicable-Kosher Symbols, Customer Codes, Production Date and/or Expiration Date

Standard Packing: 50 lb. bag in box. 2000- lb. per pallet

Optional Pack Sizes: 1 lb pouch, 10 lb bag in box. MOQ is flexible.

Storage

Store in a cool (60-80 ° F), dry place.

Shelf Life

Shelf Life: 9 months

Ingredients

Modified food starch, Guar gum, Locust bean gum, Cellulose gum, Agar, Standardized with Dextrose.

Nutritional Information (per 100g)

Parameter	Value	Unit
Calories	340	Kcal
Total Fat	0	g
Saturated Fat	0	g
Trans Fat	0	g
Cholesterol	0	mg
Sodium	270	mg
Total Carbohydrates	85	g
Dietary Fiber	18	g
Total Sugar	38	g
Added Sugar	38	g
Protein	1	g
Vitamin D	0	mcg
Calcium	30	mg
Iron	0.2	mg
Potassium	60	mg
Vitamin A	0	mcg
Vitamin C	0	mg

Usage Levels

Suggested Level: Varies with application.

Intended Use: Meringues, icing, and glazes.

Certifications Kosher

General:

- A. This material will comply with the requirements of the Federal Food, Drug, and Cosmetic Act and its amendments.
- B. This material will be manufactured under good manufacturing practices as prescribed by F.D.A. regulations.
- C. This material is subject to approval by the Quality Control Laboratory.
- D. This material will conform to specifications contained in the Food Chemicals Codex.