

SI-100

DESCRIPTION

SI-100 is a concentrated, highly refined *iota* carrageenan designed to be a versatile performer in imitation chocolate milks (combined with a suitable *kappa* carrageenan), low-fat ground meats and as a general purpose suspension and emulsion stabilizer.

SPECIFICATIONS

Primary

- Water Viscosity (1.5% at 75°C) ----- Minimum 20 cps. (Brookfield LV) ----- WV001
- Milk Gel Strength ----- 30 to 60 g/cm² (Ta.XT) ----- MG001

Standard

- Powder color ----- Cream to light tan ----- GEN001
- Powder Particle Size ----- 90% through 80 Mesh ----- GEN002
- Moisture ----- Maximum 12% ----- GEN003
- pH(1.0% at 50°C) ----- 8.0 to 11.0 ----- GEN004

Microbiological

- Total plate count ----- Less than 5000 cfu/g ----- FDA BAM
 - Molds and yeasts ----- Less than 100 cfu/g ----- FDA BAM
 - Coliforms ----- Less than 10 cfu/g ----- FDA BAM
 - E. coli ----- Negative ----- FDA BAM
 - Salmonella ----- Negative in 25g ----- FDA BAM
 - Staphylococcus aureus ----- Negative ----- FDA BAM
 - Listeria monocytogenes ----- Negative ----- FDA BAM
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Ingredients Labeling: Carrageenan

Typical Use Level: 0.05% to 0.08% (500 - 800 ppm) by weight of the final product in imitation milks and 0.5% in low fat ground meats. Typically used with a kappa carrageenan such as CM-61BF.

PROPERTIES AND INFORMATION

SI-100 is a pure *iota* carrageenan product designed primarily for lightly-gelled dairy products and ground meat. Iota carrageenans form thermally reversible elastic gels and respond primarily to calcium and magnesium. Increasing calcium or magnesium in the system to which iota carrageenans are added increases dispersibility, gel strength, and the temperatures of solubility, gelation, and remelt. Iota gels are thixotropic and tend to heal after shearing. At low concentrations, iota carrageenans suspend even dense solids. Iota gels display low syneresis and good freeze-thaw stability. When added to water, carrageenan should be pre-blended with other dry ingredients for optimum dispersion and should be added to the liquid slowly with medium to high shear mixing for best results.

NUTRITIONAL ANALYSIS SUMMARY

(Call our Technical Service Department for a Full Nutritional Analysis Sheet)

Nutrient	Quantity (Dry per 100g)	Method
Calories	250*	4-9-4 Rule
Total Fat	0 g	AOAC 945.44
Total Carbohydrate	62 g	21 CFR 101.9 (c)(6)/FDA
Total Dietary Fiber	0 g	21 CFR 101.9 (c)(6)(i)/FDA
Insoluble Fiber	0 g	AIM/JECFA
Soluble Fiber	62 g	AOAC 985.29
Total Sugars	0 g	Per Formulation
Total Protein	0.5 g	AOAC 990.03/992.23
Sodium	4.2 g	ICP-OES
Potassium	4.0 g	ICP-OES
Iron	45 ppm	ICP-OES
Vitamin D	<0.01 µg	AOAC 2002.05

* **NOTE!** Carrageenan is soluble fiber and subject to the 4-9-4 rule. However, carrageenan is not digested and thereby non-caloric.

Technical Service

For assistance with this or any ISI carrageenan products, please contact our technical service representatives at **1-800-628-3166**.

Shelf Life & Storage

Fifty (50) lb., 2-ply, poly-lined paper bags. Store the product in a cool, dry environment. When using recommended storage conditions, shelf life is two years in original, unopened packaging.

Regulatory

The carrageenan in this product meets the definitions and requirements for carrageenan as set forth in 21 C.F.R. 172.620 and 172.626 (augmented by material contained in the Federal Register of July 10, 1979:44 FR40343). It meets the specifications as set forth in FCC, 10th Edition as well as being allowed as a food additive in Canada under C.R.C., C.870 (Section B.16.100), Table IV.

Warranty

Ingredients Solutions, Inc. warrants that its products are not misbranded or mislabeled at the time they are shipped from its plant or warehouse. ISI makes no other warranties express or implied regarding its products. Application recommendations made by ISI are based on its research using specific formulations and ingredient sources and are believed to be accurate at the time of printing. However, ISI cannot guarantee the suitability of its products for a given use and suggests that customers review application suitability with a technical representative of ISI. ISI cannot warrant against possible infringement of third-party application patents and recommends that its customers review the relevant patent literature.