

# TECHNICAL DATA SHEET

## IOTA SEMI-REFINED CARRAGEENAN



We provide customized application solutions

### **DESCRIPTION:**

A natural hydrocolloid, carrageenan is a natural extract from specific red seaweed species that are farmed and processed. Iota Semi-Refined Carrageenan is standardized with sucrose. It is usually used in water applications where a weak cohesive and elastic gel is required. Strongly gels in the presence of calcium ions.

### **ORIGIN:**

China

### **PROPERTIES:**

Unlike kappa, iota-carrageenan forms gels with freeze-thaw stability and is less likely to undergo syneresis. The iota form is soluble in hot water, and only the sodium salts of iota-carrageenan are soluble in cold water.

Iota-carrageenan gels have the ability to break apart during mechanical action and reform once the mechanical action stops, which is known as thixotropy. This property is helpful in cold-filled products. Within food applications, low usage levels of iota-carrageenan are used to suspend particulates within salad dressings (EU) and other beverages like soy milk (EU). At higher usage levels, iota creates a stronger gel and is used in products like pet foods to create gravy.

### **SENSORY CHARACTERISTICS:**

It is a fine granulometry powder with yellowish color and neutral odor and taste.

### **CHEMICAL AND PHYSICAL CHARACTERISTICS:**

Viscosity(1.5% 75°C):	≥ 5 mPa.s
Gel Strength:	---
(1.5%+0.2% KCL 20°C)	
Moisture(105°C):	≤ 12 %
Total Ash (550°C):	15 - 40 %
pH (1%):	8 - 11
Sulphates:	15 - 40 %
Acid Insoluble Ash:	≤ 1 %
Acid Insoluble Matter:	≤ 2 %
Lead (Pb):	≤ 5 ppm
Arsenic (As):	≤ 3 ppm
Mercury (Hg):	≤ 1 ppm
Cadmium (Cd):	≤ 2 ppm

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### **MICROBIOLOGICAL CHARACTERISTICS:**

Total Plate Count:	Max 5,000 CFU/g
Yeast and Moulds:	Max 300 CFU/g
E.Coli:	Absent in 5 g
Salmonella:	Absent in 10 g

### **TYPICAL APPLICATIONS:**

Soft ambient gels. Milk based gels. Suspensions. Ice cream stabiliser

- Makes soft, elastic gels which are freeze/thaw stable and unlike gelatine gels can be used as a glaze for semi fredo and parfaits.
- Make crystal clear gels, perfect for topping mousses or flans.
- Iota gels strengthen in the presence of calcium, making them perfect for use in milk based recipes.

### **GMO DECLARATION:**

Carrageenan does not contain genetically modified organisms and is not produced using raw materials of a genetically modified origin. At no stage during production does the product come into contact with genetically modified organisms.

### **STORAGE CONDITIONS:**

Store away from heat and moisture, preferably at a cool and dry place. The product, when stored in these conditions and in its original unopened packaging, will maintain its initial properties for 24 months.

### **PACKAGING:**

25kg woven or kraft bag with polyethylene inner bag or As per the requirements

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