TECHNICAL DATA SHEET **IOTA 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. <u>lota Refind Carrageenan</u> 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

<u>PROPERTIES:</u>

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 a slightly off white 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 15 - 40 % Sulphates: ≤ 1 % Acid Insoluble Ash: ≤ 2 % Acid Insoluble Matter: Lead (Pb): ≤ 5 ppm Arsenic (As): ≤ 3 ppm ≤ 1 ppm Mercury (Hg): ≤ 2 ppm Cadmium (Cd):

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MICROBIOLOGICAL CHARACTERISTICS:

Total Plate Count: Max 5,000 CFU/g Yeast and Moulds: Max 300 CFU/g Absent in 5 g E.Coli: 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.
- lota gels strengthen in the presence of calcium, making them prefect for use in milk based recipes.

GMO DECLARATION:

Carrageenan does not contain genetically modified organisms and is not produced usingraw materials of a genetically modified origin. At no stage during production does the productcomes 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