



DESCRIPTION:

Carrageenan is extracted from seaweed, and it provides unique functional characteristics that can be used to gel, thicken and stabilise food and non food systems. It plays an important and valued role in modern-day formulations providing texture, structure and physical stability in many products.

ORIGIN:

China

PROPERTIES:

- Kappa Carrageenan = Firm Gel

Kappa-carrageenan yields a strong gel often described as firm and brittle in the presence of potassium ions, and may have syneresis. Kappa needs to be solubilized in hot water, but the sodium salts of kappa-carrageenan can be soluble in cold water. The resulting gels are not freeze-thaw stable.

- Iota Carrageenan = Elastic Gel

Iota forms a soft elastic gel especially in the presence of calcium ions (EU) and the resulting gel strength is ionic strength dependent. 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.

SENSORY CHARACTERISTICS:

It is a fine granulometry powder with a slightly off white color and neutral odor and taste.

CHEMICAL AND PHYSICAL CHARACTERISTICS:

	Kappa Refined	Kappa Semi-Refined	Iota Refined	Iota Semi-Refined
Viscosity(1.5% 75°C):	≥ 5 mPa.s	≥ 5 mPa.s	≥ 5 mPa.s	≥ 5 mPa.s
Gel Strength: (1.5%+0.2% KCL 20°C)	≥1,300 g/cm2	≥ 450	---	---
Moisture(105°C):	≤12%	≤12%	≤12%	≤12%
Total Ash (550°C):	15-40%	15-40%	15-40%	15-40%
pH (1%):	8-11	8-11	8-11	8-11
Sulphates:	15-40%	15-40%	15-40%	15-40%
Acid Insoluble Ash:	≤ 1%	≤ 1%	≤ 1%	≤ 1%
Acid Insoluble Matter:	≤2%	≤15%	≤2%	≤15%
Lead (Pb):	≤5 ppm	≤5 ppm	≤5 ppm	≤5 ppm
Arsenic (As):	≤3 ppm	≤3 ppm	≤3 ppm	≤3 ppm
Mercury (Hg):	≤1 ppm	≤1 ppm	≤1 ppm	≤1 ppm
Cadmium (Cd):	≤2 ppm	≤2 ppm	≤2 ppm	≤2 ppm

TECHNICAL DATA SHEET

CARRAGEENAN



We provide customized application solutions

MICROBIOLOGICAL CHARACTERISTICS:

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

TYPICAL APPLICATIONS:

Carrageenan can be found in a number of foods you eat every day, including yogurts, cheeses, chocolate milk and almond milk, ice cream, salad dressing, jams and jellies, hotdogs, beers and more.

It can also be found in personal care products like toothpaste, shampoo and air fresheners, body soaps, face wash, makeup, pet food and more.

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

ISSUE DATE: 01ST JANUARY 2020, REV. 1.1 PAGE 2/2