

Carrageenan is a nature polysaccharides hydrocolloid contained in certain variety of red seaweeds. The main raw materials for producing carrageenan are Chondrus crispussea moss and Eucheuma. Good quality carrageenan is a yellowish to snowy white powder with no obvious odor or taste. The gel formed by carrageenan is heat-reversible for which it dissolves when heated up and return to gelling status when cooled down. Its gel strength and viscosity are stable under neutral and alkaline condition. The gelling traits and elasticity of carrageenan is enhanced and coherent when used with Konjac gum, Locust bean gum, and Xanthan gum. Carrageenan is extensively applied in food, dairy, pharmaceutical, chemical, agriculture, construction and many more special occasions. Moreover, because of its 70% total cellulose content, carrageenan is commonly seen in today's functional foods business as well. FoodGel series carrageenan is made with selected superior quality seaweeds cultivated in fresh sea water, to make sure the product we offer not only meets the foreign and domestic quality standards but also satisfies or even beyond the expectation of our clients.

New Application

CARRAGEENAN

Innovative Applications

Carrageenan for toothpaste FoodGel™ TP series carrageenan is an ideal gel and binder to accommodate complicated toothpaste formulars for better thixotropy and dispersibility.

Features:

- 1. Unique thixotropic characteristics, self-fusion after broken.
- 2. Grant the paste a delicate, smooth, water-retaining and viscoelastic body.3. Improving paste stability.

Product: FoodGel™ TP001



Carrageenan for Capsules

FoodGel™ CP series carrageenan is made by high quality natural seaweed obtained from fresh sea water. It is a natural vegan derived raw material fits the habits of people from different cultural backgrounds and various religious beliefs, for which carrageenan is an ideal substitute for animal-derived capsules.

Features:

- 1. Good film-forming characteristics and resistance effect
- 2. Provides sufficient strength and gloss of the capsule wall
- 3. Disintegrate quickly, safe without side effect
- 4. Better stability of the formed capsule: high resistance to brittle at low temperature and deformation at high temperature



Product: FoodGel™ CP001







Conventional Application Series

FoodGel™ M series uses carrageenan extracted from natural seaweed which forms an even gel with meat protein. It creates an extensive network structure when heated to retain water and reduce meat juice loss in the final products, moreover, this network structure gives meat products great elasticity. Besides, carrageenan prevents the loss of salt-soluble myosin and actin, inhibits the dissolution and volatilization of umami components, limiting the water activity of meat products which prolongs the shelf life of the meat products.

Features:

Improves water and oil retention; Grants emulsification effect; Provides an appropriate mouth feel.

Products:

FoodGel™ M141 FoodGel™ M106 FoodGel™ M159

Routine Application

CARRAGEENAN

Jelly Pudding

FoodGel™ J series uses carrageenan extracted from natural seaweed and high-quality konjac gum made by Foodmate as the main raw materials. It is scientifically compounded and easy to use for making a variety of textures or multi-layered jelly. The mouthfeel is bouncy, tender, slippery and more.

Features: Crystal clear texture Low water separation Good flavor release

Products: FoodGel™ J2310 FoodGel™ J213 FoodGel™ J207



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Gummies

FoodGel™ SC series uses carrageenan extracted from pure natural seaweed as the main raw material and compounded with other functional ingredients scientifically. It is easy to use and versatile in applications such as fruit and vegetable cakes, soft sweets, fudge, chewy candies etc.

Features:

- 1. Crystal clear, attractive appearance
- 2. User-friendly
- 3. No teeth-sticking, better flavor release

Products:

FoodGel™ SC001

FoodGel™ SC002



Dairy & Beverage

FoodGel™ DB series carrageenan can be compounded with other colloids and emulsifiers and used in neutral milk-containing beverages and vegetable protein beverages. It improves the stability of protein effectively and forms a stable suspension structure by reacting with protein.

Features:

- 1. Extend product shelf life
- 2. Improve texture and mouthfeel
- 3. Better flavor release

Products:

FoodGel™ D011(Cocoa milk) FoodGel™ D018(Milk dringks) FoodGel™ Y003 Y008





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Processed Cheese

FoodGel™ PC series carrageenan is used in processed cheese to form a stable network structure by reacting and attaching with protein which improves the elasticity and firmness of the cheese, grants a delicate texture along with improved viscosity and gloss of the cheese.

Features:

- 1. Sound water retention
- 2. Optimize the texture of cheese to give a delicate texture
- 3. Good flavor release

Products: FoodGel™ ZC2000



Ice Cream

FoodGel™ IC series carrageenan can be used in ice cream after being compounded with other colloids and emulsifiers. Carrageenan forms a stable network structure by reacting with the protein which grants a delicate texture to the final product.

Features:

- 1. Reduce and inhibit the formation of ice crystals
- 2. Improve expansion rate and melting resistance of the ice cream
- 3. Reacts with protein to form a network structure to increase the creamy texture

Product: FoodGel™ IC002



Crab Sticks

FoodGel™ F series is a compound made of carrageenan-based Hydrocolloids. It is used in crab sticks, fish fillets, tumbling meat products and other products.

Features:

1. High strength, high viscosity, and good adhesion; 2. Improve the freeze-thaw resistance of starch; 3. Effectively improve the water retention of the product, increase elasticity, smooth and delicious.

Product: FoodGel™ F101 FoodGel™ F201

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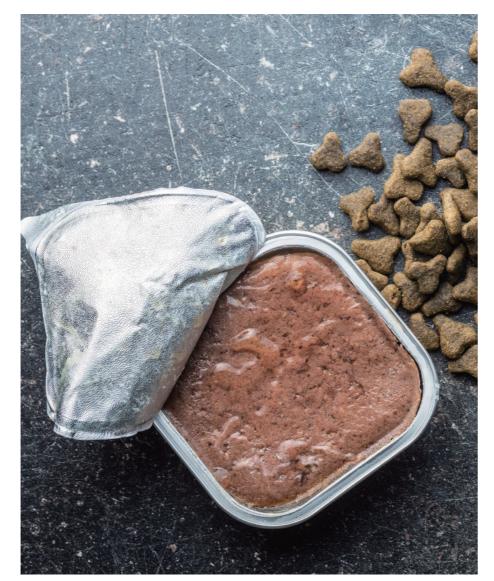
Pet Food

FoodGel™ PF series uses carrageenan extracted from high-quality seaweeds. It is a natural gelling agent which forms an even gel with protein. Moreover, it presents a superior trait of water and meat juice retention as well as good gel elasticity for better palatability.

Features:

- 1. Good thickening and emulsifying effect;
- 2. Improve water and oil retention;
- 3. Inhibit the dissolution and volatilization of umami components, reduce the water activity of the products and extend the shelf life.

Products: FoodGel™ PF001 FoodGel™ PF002





Solid Air Freshener

FoodGel™ AF series uses high-quality carrageenan to form a gel with high hardness and resilience which has wide temperature acceptance in comparison to agar gel, Additionally, it also has a clearer, more transparent body as well as advantages such as long-lasting fragrance release, high water retention, and contraction resistance. Features:

- 1.Good water retention
- 2.Strong gel and good stability
- 3. High transparency, good frost resistance

Beer Fining

FoodGel™ BE series uses special carrageenan extracted from high-quality seaweed. As a natural green food, its safety is recognized by the United Nations Food and Agriculture Organization. There are two types of wort clarifiers: granules and powders. It performs the function of absorbing protein, removal of coagulable nitrogen which grants the beer a transparent and bright body.

- 1. Low dosage using, easy to disperse and easy to filter;
- 2. Improve the non-biological stability of beer effectively;
- 3. Increase the yield of wort and extend shelf-life;
- 4. Simple to use, low cost and good performance.

Products: FoodGel™ BE40 FoodGel™ BE10









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