gelling agent. One problem with these combinations is that when increasing the salt content of the food product, the dosage of the gelling agent needs to be increased since the gel loses strength as the salt content is increased. There is a need for a gelling agent composition which is stable or has increased gel strength when salt content is increased enabling the production of a more consistent product over a wide range of salt concentrations. Another problem is that these combinations, when used to make a soup or sauce, are still able to form a gel very quickly during cooling. This can lead to an undesirable texture for consumption of the product when the dish is cooling. There is therefore a need for a gelling agent composition which does not gel during the normal food consumption times.

WO 2008/151852, describing the use of xanthan and cassia gum, has the drawback that cassia gum is not available in the quantities required for industrial production in food grade quality, or is very expensive. Furthermore, the regulatory status of cassia gum is still not clear in many countries, making its use in industrial products very difficult.

A combination of gelatin and starch is described in WO 2007/068402 and WO 2007/068483. The main problem with this combination is that a very high dosage of gelling agents is needed (greater than 10 %). Also, gelatin is not popular as a food ingredient with those preferring a vegetarian diet.

JP 2001-258517 describes the use of agar, xanthan and locust bean gum. The possible use of carrageenan instead of xanthan and locust bean gum is also mentioned. But this gelling composition suffers from the problem that the composition cannot be melted quickly when reheated and added to hot water. An easy melting gel is an important characteristic desirable for concentrated food products.

It has now been found that a combination of iota-carrageenan and xanthan has certain desirable and surprising characteristics.

EP 1 031 345 the preparation of a calcium polystyrene sulfonate-containing gel comprising carrageenan, xanthan gum and locust bean, but does not teach the use of iota-carrageenan.

An object of the present invention is therefore to provide a gel composition that at least goes part way to overcoming one or more of the above disadvantages of existing gel compositions or at least provides a useful alternative.

## SUMMARY OF THE INVENTION

In a first aspect of the invention there is provided a composition in the form of a gel for preparing a food product, the composition comprising:

a) water in the amount of 30 to 70 % (by weight of the total composition),

b) flavourings in the amount of 1 to 40 % (by weight of the total composition),

c) salt in the amount of 10 to 25 % (by weight of the total composition), and

d) gelling agents in the amount of 0.2 to 5 % (by weight of the total composition),

wherein the gelling agents comprise at least iota-carrageenan and xanthan.

The amount of gelling agents in the composition may preferably be 0.6 to 2 %. The ratio of iota-carrageenan and xanthan is preferably in the range of 80:20 to 30:70, but more preferably in the range 50:50 to 60:40. The gelling agents may further comprise starch or another carrageenan type.

The composition may also comprise fat, preferably in the amount of 1 to 10 %. Maltodextrin or glucose syrup in the amount of up to 40 % may also be included. The amount of water is preferably in the range 40 to 60 %, more preferably 45 to 60 %. Flavourings are included in the composition typically in the amount of 1 to 30 %, preferably 5 to 15 %.

In preferred embodiments of the invention, the composition is adapted to be heat reversible, meaning that it melts when reheated to a temperature above 75 °C and dissolves when added to boiling water in less than 2 minutes.

The composition of the invention may be used to prepare any suitable food product, especially sauces, soups, stocks, bouillons or gravies.

In a second aspect of the invention there is provided a process for preparing a composition according to the invention ~~in the form of a gel for preparing a food product~~ comprising the steps:

a) mixing gelling agents including at least iota-carrageenan and xanthan, in water,
b) heating to a temperature of at least 70 °C, preferably at least 80 °C,
c) adding salt and flavourings, and mixing,
d) heating at a temperature of at least 75 °C, preferably at least 80 °C, to pasteurize,
e) filling into containers, and
f) cooling to room temperature to form the gel.

The process may further comprise making a premix of the gelling agents with maltodextrin or glucose syrup and/or starch. The process may also comprise adding fat after mixing of the gelling agents.

In another aspect of the invention there is provided a use of the composition of the invention for preparing a food product, such as a sauce, soup, stock, soup base, bouillon or gravy.

**DETAILED DESCRIPTION**

There is a need for a composition for preparing a food product having the texture of a gel and which is able to withstand high salt contents. The gel-forming composition should be able to set and melt reversibly. The melting temperature should be in a range allowing the composition to melt easily during a standard heating step or to allow dilution of the gel composition in hot water. There is further a need for a gel composition for preparing a food

| | | |
|---|---|---|
| **Rupture Strength [g]** | 185 | 183 |

The rupture strength after one day for each of the two recipes shows that if the salt content is increased and the content of water and other ingredients is kept constant, the same gel strength can be obtained for an iota-carrageenan/xanthan combination and even if the content of gelling agents is reduced slightly.

It is to be appreciated that although the invention has been described with reference to specific embodiments, variations and modifications may be made without departing from the scope of the invention as defined in the claims. ~~Furthermore, where known equivalents exist to specific features, such equivalents are incorporated as if specifically referred to in this specification.~~

**CLAIMS**

1. A composition in the form of a gel for preparing a food product, the composition comprising:

a) water in the amount of 30 to 70 % (by weight of the total composition),

b) flavourings in the amount of 1 to 40 % (by weight of the total composition),

c) salt in the amount of 10 to 25 % (by weight of the total composition), and

d) gelling agents in the amount of 0.2 to 5 % (by weight of the total composition),

wherein the gelling agents comprise at least iota-carrageenan and xanthan.

2. A composition as claimed in claim 1, wherein the amount of gelling agents is 0.6 to 2 % (by weight of the total composition).

3. A composition as claimed in claim 1 or claim 2, wherein the ratio of iota-carrageenan and xanthan is in the range of 80:20 to 30:70, preferably in the range 50:50 to 60:40.

4. A composition as claimed in any one of claims 1 to 3, wherein the gelling agents further comprise starch or another carrageenan type.

5. A composition as claimed in any one of claims 1 to 4, further comprising fat in the amount of 1 to 10 % (by weight of the total composition).

6. A composition as claimed in any one of claims 1 to 5, further comprising maltodextrin or glucose syrup in the amount of up to 40 % (by weight of the total composition).

7. A composition as claimed in any one of claims 1 to 6, wherein the amount of water is in the range 40 to 60 %, preferably 45 to 60 %.

8. A composition as claimed in any one of claims 1 to 7, wherein the amount of flavourings is in the range 1 to 30 %, preferably 5 to 15 %.

~~9. A composition in the form of a gel for preparing a food product, the composition comprising iota-carrageenan and xanthan, wherein the composition is adapted to melt when reheated to a temperature above 75 °C and dissolve when added to boiling water in less than 2 minutes.~~

~~10. A composition as claimed in any one of claims 1 to 9 which is heat reversible.~~

~~11.~~9. A composition as claimed in any one of claims 1 to ~~10~~8, wherein the food product is a sauce, soup, stock, bouillon, soup base or gravy.

~~12.~~10. A process for preparing a composition according to one of the claims 1 to 9 ~~in the form of a gel for preparing a food product~~ comprising the steps:

a) mixing gelling agents including at least iota-carrageenan and xanthan, in water,
b) heating to a temperature of at least 70 °C, preferably at least 80 °C,
c) adding salt and flavourings, and mixing,
d) heating at a temperature of at least 75 °C, preferably at least 80 °C, to pasteurize,
e) filling into containers, and
f) cooling to room temperature to form the gel.

~~13.~~11. A process as claimed in claim ~~12~~10, further comprising making a premix of the gelling agents with maltodextrin and/or glucose syrup and/or starch.

~~14.~~12. A process as claimed in claim ~~12~~10 or claim ~~13~~11, further comprising adding fat after mixing of the gelling agents.

~~15.~~13. The use of a composition as claimed in any one of claims 1 to ~~11~~9 for preparing a food product.