

**Claims**

1. A method for producing a frozen confectionery product, comprising the steps of:
- 5 a) providing an ice confection mix comprising dairy proteins, at a pH comprised between 5.6 and 6.5;
- 10 b) heating the mix at a temperature comprised between 90°C and 140°C for 5 seconds to 30 minutes to at least partially form a coagulated protein system including casein and whey protein comprising beta-lactoglobulin; with the proviso that the temperature is not 90°C,
- 15 c) homogenising the mix before the heat treatment;
- d) cooling and optionally ageing the mix;
- e) freezing while optionally aerating the mix to an overrun of at least 20%, preferably at least 40%, most preferably between 100% and 120% to form the aerated frozen confectionery product;
- 20 f) optionally hardening the confectionery product.
2. A method according to claim 1, wherein the freezing step is followed by subjecting the confectionery product to a dynamic cooling at a temperature below -
- 25 11°C in a single or twin screw extruder.
3. A method according to any one of claims 1 to 2, wherein the ice confection mix further comprises fat in an amount of 0.5-20 wt%, milk solids non-fat in an amount of 5-15 wt%, a sweetening agent in an amount
- 30 of 5-30 wt%, a stabiliser system in an amount up to 6 wt%.
4. A method according to any one of claims 1 to 3 wherein the ice confection mix further comprises any
- 35 flavours, colourings, proteins, water, acidifying components, alkalising components.
5. A Method according to any of the preceding claims,
- 40 characterized in that the ice confection mix comprises