Claims

1. Cooling container with at least one continuous receiving space for receiving a product and at least two cooling sections adjacent to the receiving space for receiving cooling elements, the receiving space being divided into at least two zones, the at least two zones comprising a first zone and a second zone that are spatially connected to each other, the cooling sections including a first cooling section adjacent to the first zone, and a second cooling section adjacent to the second zone,

   wherein at least one first cooling element is provided in the first cooling section, the first cooling element being configured to cool the first zone to a temperature below -10°C, and at least one second cooling element is provided in the second cooling section, the second cooling element being configured to cool the second zone to a temperature between 0°C and 7°C.

2. Cooling container according to claim 1, **characterized** in that the cooling container comprises a base body (1, 1') and a lid (2, 2') that define the continuous receiving space together, wherein the first cooling section and the first zone are arranged in the base body (1, 1'), that the second cooling section and the second zone are arranged in the lid (2, 2') and that the lid (2, 2') is placed on the base body (1, 1') in such a way that the continuous receiving space is closed.

3. Cooling container according to claim 2, **characterized** in that the lid has a top side away from the base body, and the second cooling element is arranged within the lid on the top side.

4. Cooling container according to claim 2, **characterized** in that the at least one first cooling element is one first cooling element formed in a cup shape, or a plurality of first cooling elements disposed in a cup-shaped arrangement.

5. Cooling container according to claim 2, **characterized in** that the base body (1, 1') is made of a thin-walled material, and the lid (2) is made of a thin-walled material.

6. Cooling container according to claim 1, **characterized in** that the first cooling element (6, 6', 6", 6"') has the first temperature and the second cooling element (9, 9', 9") has the second temperature.

7. Cooling container according to claim 2, **characterized in** that it has at least one of the following features:

- The base body has at least one insert (11, 11', 11") holding a cup (3) of the product in the first zone;
- the insert (11") in the base body (1) has a cavity (47) surrounding the cup (3) and forming a first cooling element (6"');
- the lid (2) has a dome-shaped cover cap (4);
- the cover cap (4') has a cavity (48) forming a second cooling element (9");
- the cover cap can be latched to the insert or the base body;
- two mutually complementary latching elements (21, 21', 22) are arranged on the cover cap (4) on the one hand and on the insert (16, 30) or the base body on the other;
- at least one latching element (21) is arranged on a displaceable wall (24, 31), wherein the latching can be released by changing the position of the wall (24, 31);
- wherein the displaceable wall (24) is perforated and can be torn out or the displaceable wall (31) is foldable along a crease line.

8. Cooling container according to claim 7, **characterized in** that the insert (11, 11', 16, 29) has at least one of the following features:
   - a pull tab (31) with which the insert (29) with the cup (3) held therein can be pulled out of the base body (1);

- the two mutually complementary latching elements (21, 21', 22) comprising a latching opening (21) as a first latching element, with which a latching projection (22) on the cover cap (4) interacts as a second latching element;
- the latching opening (21) is arranged on a pull tab (31), wherein the pull tab (31) can be folded over when the insert (29) is removed from the base body (1), thereby releasing the latching projection (22).

9. Cooling container according to claim 7 or 8, **characterized in** that the insert (11, 11') consists of a flat blank which has a support wall (10) with an opening (12) for receiving the cup (3), and which has a plurality of side walls (15, 15') which are connected to the support wall (10) via crease lines and hold the support wall (10) at a distance from a bottom wall of the base body (1).

10. Cooling container according to one of claims 2 to 9, **characterized in** that the base body (1") and/or the lid (2") has a region with a plurality of walls (37, 38, 39, 41, 42, 44) between which a cavity (36, 40, 43, 45) is formed.

11. Cooling container according to claim 10, **characterized by** at least one of the following features:

- a cooling liquid is filled into the cavity (40, 45);
- a thermally low conductive medium is filled into the cavity (36, 43), in particular air and in particular at a very low absolute pressure.

12. Cooling container according to claim 1, characterized in that the first cooling element and the second cooling element are further configured to maintain the temperature of the first zone and the temperature of the second zone simultaneously.

13. Cooling container according to claim 1, characterized in that the first cooling element and the second cooling element are spaced apart.

14. Cooling container according to claim 1, characterized in that the product is a composed product having at least a first product component associated with the first zone and at least a second product component associated with the second zone, the first and second product components having different respective temperature requirements.

15. Cooling container according to claim 14, characterized in that the first product component is an ice cream received in a cup and the second product component is a decoration selected from cream, fruit, fruit sauce, chocolate and fine pastry, arranged on the ice cream above a rim of the cup.

16. Method for cooling a product, in particular an ice cream product, in which at least one first cooling element (6, 6', 6", 6"') having a first temperature is introduced into a first cooling section of a cooling container adjacent to a first zone of a receiving space of the cooling container, and at least one second cooling element (9, 9', 9") having a second temperature is introduced into a second cooling section of the cooling container adjacent to a second zone of the receiving space, and in which the product is introduced into the receiving space of the cooling container;

characterized in that the receiving space is divided into the first and second zones, wherein the first, lower zone of the receiving space is cooled by the first cooling element to a first temperature below -10 °C and the second, upper zone of the receiving space is cooled by the second cooling element to a second temperature which is near or above the freezing point of water.