Claims

1. Container, in particular a plastic ampoule or bottle, manufactured in a blow moulding process, filled and sealed in the mould, with a sleeve-like neck portion (4) connecting to a container body (2) as axial extension, which forms a seat (6) for a preformed insert (8) extending along the axis (12) of the neck portion (4), wherein the insert is part of the container, and is formed in the mould at a peripheral area (14) of the insert (8), wherein at least one sealing element (42; 68) is provided on the insert (8), which forms a seal in cooperation with a contact surface (38) formed on the seat (6) of the neck portion (4) in a sealing area surrounding the axis (12), wherein the sealing element (42; 68) by the edge of a ring (42; 68) formed on the insert (8), facing the contact surface (38), on the seat (6) of the neck portion (4), wherein the sealing element (42; 68), melted by thermal input with the other adjacent plastic material of the contact surface (38), forms a solid, fluid-impermeable barrier, **characterised in that** the ring-shaped sealing element (42) has the shape of an axially projecting rib.

2. Container in accordance with claim 1, characterised in that the sealing element (42; 68) is formed by a part of the mould associated with the insert (8).

3. Container in accordance with claim 1 or 2, characterised in that the sealing element (42; 68) is connected to the end of the peripheral region (14) facing the contact surface (38) of the seat (6), on which the neck portion (4) is moulded on the insert (8).

4. Container in accordance with one of the preceding claims, characterised in that the sealing element (42) is rib-shaped and has a shape tapering towards the edge abutting the contact surface (38).

5. Container in accordance with one of the preceding claims, characterised in that at least one axially projecting structural part (46; 74) is provided on the insert (8), which is radially inwardly displaced to the ring-shaped sealing element (42; 68), extending beyond this in the direction of the container body (2).

6. Container in accordance with claim 5, characterised in that the axially projecting structural part has the shape of a coaxial truncated cone (46), tapering in the direction of the container body (2), having a concentric passage (36) open to the container body (2).

7. Container in accordance with one of the preceding claims, characterised in that the insert (8) forms a hollow cylinder (66) within the peripheral region (14), on the inner wall of which several axially projecting structural parts are provided in the form of spaced vanes (74), with their free ends (76) resting on the inside of a collar portion (10).

8. Container in accordance with claim 6, characterised in that a hollow syringe cone (28) connects the end of the peripheral region (14) of the insert (8) remote from the container body (2), its cavity (30) aligning with the bore-like passage (36) of the truncated cone (46), from which it is separated by a crosspiece (32), which forms a wall portion (34) that can be perforated for the delivery procedure.

9. Container in accordance with claim 8, characterised in that surface irregularities (24, 26; 52; 54; 56; 58; 72) are present on the peripheral region (14) of the insert (8), formed by parts of the surface which are separated from one another by radially recessed or elevated areas of the surface and are axially displaced in relation to the annular sealing element (42) in the direction of the cone (28).

10. Container in accordance with claim 8 or 9, characterised in that at the end of the neck portion (4) remote from the container body (2) an overmould closure cap (16) surrounding the syringe cone (28) is moulded on, forming a predetermined breaking point (18) enabling detachment from the neck portion (4).

11. Container in accordance with claim 10, characterised in that a one-piece male Luer-lock (40) is fitted on the insert (8), which has a closure member (92) at the upper end of its cone (28), which is connected to the overmould closure cap (16) and with its separation can be separated with this to open the cone at a separation point (91) at the end of the Luer lock (90).

12. Container in accordance with claim 10 or 11, characterised in that the closure member (92) has a bar (93) extending axially away from the cone (28), which is integrated into the overmould closure cap (16) in the portion of grip portions (82, 84) moulded on as a twisting knob.

13. Container in accordance with one of the preceding claims, characterised in that the insert (8) is formed from at least two different materials, of which at least one can be softened at low temperature.

14. Container in accordance with claim 13, characterised in that the softenable material is a thermoplastic polymer having good adhesiveness to the polymer material of the container body, in particular a thermoplastic elastomer (TPE), and that a further material consists of a polymer with higher softening temperature.

15. Method, that is intended for the manufacture of a container in accordance with one of the claims 1 to 14, characterised in that the sealing element (42; 68) of the insert (8) is energised before its insertion into a blow moulding device (97, 99), namely heated.

16. Method in accordance with claim 15, characterised in that the operation of putting the insert (8) into the blow moulding device (97, 99) is carried out so that only an axial pressure is applied initially, to ensure a fusion joint of the sealing element (42; 68) to the seat (6) of the neck portion (4), and that then, deferred, radial forces are applied by closing head jaws (97), to produce the toothing on the surface irregularities (24, 26; 52; 54; 56; 58; 72) of the peripheral region (14).