Claims

1. A bung plug seal (10, 50, 73, 74) for bung containers, the bung plug seal having a bung plug (11) for being disposed in a bung socket of the bung container, the bung plug (11) having a plug depression (16) for inserting a fitting tool,
wherein
the plug depression (16) has a depression bottom (15) provided with at least one ventilation opening (23) and the bung plug (11) is provided with a ventilation plug (12, 51, 63, 64) which is disposed in the plug depression (16) and which has a thread bolt (13, 52, 65, 75) accommodated in an internal thread (39) of a receiving hole (14) formed in the depression bottom (15) which receiving hole (14) is formed independent from the ventilation opening (23) and which has a lid disk (29) provided with a handling unit (35) and connected to the thread bolt (13, 52, 65, 75) for sealing the ventilation opening (23) in a closed position of the ventilation plug (12, 51, 63, 64).

2. The bung plug seal according to claim 1,
wherein
the thread bolt (13, 52, 65, 75) has a spring member (55, 68) for being supported against a wall surface of the receiving hole (14) or the receiving hole (14) has a spring member for being supported against a wall surface of the thread bolt (13, 52, 65, 75), in such a manner that a preload force F is effective between the thread bolt (13, 52, 65, 75) and the receiving hole (14).

3. The bung plug seal according to claim 2,
wherein
the spring member (55, 68) is formed on a wall surface of the thread

bolt (13, 52, 65, 75) or the receiving hole (14), said wall surface being formed by a thread surface (56).

4. The bung plug seal according to claim 3, wherein the spring member (55) has at least one spring tab (57) which is formed on the thread bolt (13, 52) and which has a tab head (59) radially protruding a thread core (58) of the thread bolt (13, 52).

5. The bung plug seal according to claim 4, wherein the spring member (55) has a plurality of spring tabs (57) whose tab heads (59) are disposed in a shared horizontal plane of the thread bolt (13, 52).

6. The bung plug seal according to claim 5, wherein the spring tabs (57) are disposed on a lower end of the thread bolt (13, 52).

7. The bung plug seal according to claim 3, wherein the spring member (68) is formed on a thread section (70) of the thread bolt (65) or of the internal thread (39) of the receiving hole (14).

8. The bung plug seal according to claim 7, wherein the spring member (68) has at least one spring tab (69) formed on a thread section (70), said spring tab (69) having a radial thread protrusion (71) formed on the thread section.

9. The bung plug seal according to any one of the preceding claims, wherein
the lid disk (29) has a locking member (33) which interacts with a counter-locking member disposed in the plug depression (16), in such a manner that the axial relative movement of the lid disk (29) in the plug depression (16) is limited by the depression bottom (15) on one side and by the counter-locking member on the other side.

10. The bung plug seal according to claim 9,
wherein
the counter-locking member has counter-locking elements (34) which are disposed on an inner wall (19) of the plug depression (16) and which are formed so as to interlock with an annular locking protrusion which is formed on an engagement member of a sealing cap which is inserted into the plug depression (16).

11. The bung plug seal according to any one of the preceding claims, wherein
the bung plug (11) has a gas exchange mechanism (38) formed on the depression bottom (15) for ventilating and de-airing a container interior of the bung container, the gas exchange mechanism (38) having a gas exchange opening which is disposed in the depression bottom (15), the thread bolt (13, 65) which is disposed in the receiving hole (14) having a passage hole which serves as a gas exchange hole (43) for forming the gas exchange opening.