

CLAIMS

1. An adaptor (10) for coupling with a medical container (1), said medical container having a collar (3) closed by a septum (4), said septum
5 having an outer surface (4a) directed towards the outside of the medical container, the adaptor comprising:
- a gripping member (20) for securing the adaptor to the medical container,
 - a needle access port (44) intended to face the outer surface (4a)
10 of the septum when the adaptor is coupled to the medical container,
- a pierceable elastomeric piece (50) having a longitudinal axis L located into the needle access port, said pierceable elastomeric piece having a recess (51) with a proximal opening (51a), an outer wall (54) in contact with the needle access port (44), and a distal surface (53) comprising a protruding part
15 (53a) intended to be engaged with the outer surface (4a) of the medical container septum (4),
- wherein the elastomeric piece (50) and the needle access port (44) comprise attaching means (44e, 56, 57, 44d) for maintaining the elastomeric piece (50) into said needle access port (44) when a pressure is
20 applied by the protruding part (53a) on the outer surface (4a) of the septum (4).
2. The adaptor according to claim 1, wherein the ratio between the height (H1) of said recess (51) regarding its width (W1) ranges from 0.3 to 0.7, preferably is about 0.6.
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3. The adaptor according to claim 1 or 2, wherein said recess (51) comprises a bottom surface (51c) defining a central protrusion (55).
4. The adaptor according to claim 3, wherein the ratio
30 between the height (H2) of said central protrusion (55) regarding the height (H1) of said recess (51) ranges from 0.1 to 0.3 and the ratio between the width (W2) of said central protrusion (55) regarding the width (W1) of said recess (51) ranges from 0.3 to 0.7.

5. The adaptor according to any one of claims 1 to 4, wherein the elastomeric piece (50) has a proximal surface (52) sloped distally to the center of said recess.

5 6. The adaptor according to claim 5, wherein the slope of the proximal surface (52) of said elastomeric piece forms an angle (α) ranging from 45° to 75° regarding said longitudinal axis L.

7. Use of an adaptor according to any one of claims 1 to 6 to
10 prevent the contamination of the inside of a medical container closed by a septum.

8. An assembly comprising an adaptor (10) coupled with a medical container (1), said medical container having a collar (3) closed by a
15 septum (4), said septum having an outer surface (4a) directed towards the outside of the medical container, the adaptor comprising:

- a gripping member (20) for securing the adaptor to the medical container,
- a needle access port (44) intended to face the outer surface (4a)
20 of the septum when the adaptor is coupled to the medical container,
a pierceable elastomeric piece (50) having a longitudinal axis L, located into said needle access port (44), said pierceable elastomeric piece having a recess (51) with a proximal opening (51a) and an outer wall (54) in contact with the needle access port, a distal surface (53) comprising a
25 protruding part (53a) intended to be engaged with the outer surface (4a) of the medical container septum (4),
- wherein the elastomeric piece (50) and the needle access port (44) comprise attaching means (44e, 56, 57, 44d) for maintaining the elastomeric piece (50) into said needle access port (44) when a pressure is
30 applied by the protruding part (53a) on the outer surface (4a) of the septum (4).

9. The assembly of claim 8, wherein the attaching means comprises a circular groove (56) present on the outer wall of said elastomeric piece and at least one peg (44e) extending radially from the needle access port
35 (44), said at least one peg (44e) being engaged within said groove (46).

10. The assembly of claim 9, wherein the attaching means comprises three pegs (44e) extending radially from the needle access port (44).

5 11. The assembly of any one of claims 8-10, wherein the attaching means comprise a shoulder (57) defined on the outer wall (54) of said elastomeric piece (50) and a distal abutment surface (44d) defined in the needle access port (44), said shoulder (57) resting against said distal abutment surface (44d).

10 12. Use of a pierceable elastomeric piece having a recess (51) with a proximal opening (51a) to prevent the contamination of the inside of a medical container closed by a septum.

15 13. Use of a pierceable elastomeric piece according to claim 12, said pierceable elastomeric piece further comprising a central protrusion (55).

20 14. Use of a pierceable elastomeric piece according to claim 12 or 13, said elastomeric piece further comprising part of attaching means (56, 57) for maintaining the elastomeric piece (50) into tight contact with the septum of the medical container.

25 15. Use of a pierceable elastomeric piece according to any one of claims 12 to 14, wherein the ratio between the height (H1) of said recess (51) regarding its width (W1) ranges from 0.3 to 0.7, preferably is about 0.6.

CLAIMS

1. An adaptor (10) for coupling with a medical container (1), said medical container having a collar (3) closed by a septum (4), said septum
5 having an outer surface (4a) directed towards the outside of the medical container, the adaptor comprising:
- a gripping member (20) for securing the adaptor to the medical container,
 - a needle access port (44) intended to face the outer surface (4a)
10 of the septum when the adaptor is coupled to the medical container,
 - a pierceable elastomeric piece (50) having a longitudinal axis L located into the needle access port, said pierceable elastomeric piece having a recess (51) with a proximal opening (51a), an outer wall (54) in contact with the needle access port (44), and a distal surface (53) comprising a protruding part
15 (53a) intended to be engaged with the outer surface (4a) of the medical container septum (4),
 - wherein the elastomeric piece (50) and the needle access port (44) comprise attaching means (44e, 56, 57, 44d) for maintaining the elastomeric piece (50) into said needle access port (44) when a pressure is
20 applied by the protruding part (53a) on the outer surface (4a) of the septum (4)
 - and wherein the ratio between the height (H1) of said recess (51) regarding its width (W1) ranges from 0.3 to 0.7.
2. The adaptor according to claim 1, wherein the ratio
25 between the height (H1) of said recess (51) regarding its width (W1) is about 0.6.
3. The adaptor according to claim 1 or 2, wherein said recess (51) comprises a bottom surface (51c) defining a central protrusion (55).
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4. The adaptor according to claim 3, wherein the ratio between the height (H2) of said central protrusion (55) regarding the height (H1) of said recess (51) ranges from 0.1 to 0.3 and the ratio between the width (W2) of said central protrusion (55) regarding the width (W1) of said recess (51)
35 ranges from 0.3 to 0.7.

5. The adaptor according to any one of claims 1 to 4, wherein the elastomeric piece (50) has a proximal surface (52) sloped distally to the center of said recess.

5 6. The adaptor according to claim 5, wherein the slope of the proximal surface (52) of said elastomeric piece forms an angle (α) ranging from 45° to 75° regarding said longitudinal axis L.

7. Use of an adaptor according to any one of claims 1 to 6 to
10 prevent the contamination of the inside of a medical container closed by a septum, said use comprising the step of coupling said adaptor with the medical container.

8. An assembly comprising an adaptor (10) coupled with a
15 medical container (1), said medical container having a collar (3) closed by a septum (4), said septum having an outer surface (4a) directed towards the outside of the medical container, the adaptor comprising:

- a gripping member (20) for securing the adaptor to the medical container,
- 20 - a needle access port (44) intended to face the outer surface (4a) of the septum when the adaptor is coupled to the medical container,
- a pierceable elastomeric piece (50) having a longitudinal axis L, located into said needle access port (44), said pierceable elastomeric piece having a recess (51) with a proximal opening (51a) and an outer wall (54) in
25 contact with the needle access port, a distal surface (53) comprising a protruding part (53a) intended to be engaged with the outer surface (4a) of the medical container septum (4),
- wherein the elastomeric piece (50) and the needle access port (44) comprise attaching means (44e, 56, 57, 44d) for maintaining the
30 elastomeric piece (50) into said needle access port (44) when a pressure is applied by the protruding part (53a) on the outer surface (4a) of the septum (4)
- wherein the ratio between the height (H1) of said recess (51) regarding its width (W1) ranges from 0.3 to 0.7.

35 9. The assembly of claim 8, wherein the attaching means comprises a circular groove (56) present on the outer wall of said elastomeric

piece and at least one peg (44e) extending radially from the needle access port (44), said at least one peg (44e) being engaged within said groove (46).

10. The assembly of claim 9, wherein the attaching means
5 comprises a circular groove (56) present on the outer wall of said elastomeric piece and three pegs (44e) extending radially from the needle access port (44), said three pegs (44e) being engaged within said groove (46).

11. The assembly of any one of claims 8-10, wherein the
10 attaching means comprise a shoulder (57) defined on the outer wall (54) of said elastomeric piece (50) and a distal abutment surface (44d) defined in the needle access port (44), said shoulder (57) resting against said distal abutment surface (44d).