[CLAIMS]

1. An intermediate element (80) for a can end (2) for a metal beverage can optionally for carbonated drinks, wherein said intermediate element is adapted to be immovably attached to said can end for shielding said can end circumferentially from the interior of said can, thus preventing the contents of said can from circumferentially passing said intermediate element to contact said can end, before use of said can by a customer and when drinking or pouring the contents of said can by said customer, wherein said intermediate element further comprises:
   - a shut-off valve (6) for sealing a drinking or pouring aperture of said can, wherein said drinking or pouring aperture is for said drinking or pouring the contents of said can; and
   - an elastic resilient element (10) for resiliently operating said shut-off valve;

   wherein said shut-off valve (6) is configured to seal said drinking or pouring aperture by contacting said intermediate element.

2. Intermediate element (80) according to claim 1 wherein said intermediate element has a side for contacting said contents of said can before said use of said can by said customer and wherein said shut-off valve (6) is configured to seal said drinking or pouring aperture by contacting said side of said intermediate element.

3. Intermediate element (80) according to claim 1 or claim 2 wherein said intermediate element is adapted to be immovably attached to said can end by seaming.

4. Intermediate element (80) according to claim 3 comprising a circumferential portion (80a) for said seaming said intermediate element to said can end.

5. Intermediate element (80) according to claim 1 or claim 2 wherein said intermediate element is adapted to be immovably attached to said can end by an adhesive, or by riveting, or by clamping, or by snapping, or by crimping, or by a combination of these.

6. Intermediate element (80) according to claim 5 comprising a sealing element (90) for said shielding said can end circumferentially from the interior of the can, wherein said sealing element (90) is attached to said intermediate element (80).

7. Intermediate element according to any one of claims 1 to 6 wherein said intermediate element is made by injection molding.

8. Intermediate element according to any one of claims 1 to 7 wherein said intermediate element is at least substantially made of at least one plastic material.

9. Intermediate element according to any one of claims 1 to 7 wherein said intermediate element is at least substantially made of at least one metal.

10. Intermediate element according to any one of claims 1 to 9 wherein said shut-off valve (6) is at least substantially made of at least one metal.

11. Intermediate element according to any one of claims 1 to 9 wherein said shut-off valve (6) is at least substantially made of at least one plastic material.

12. Intermediate element according to any one of claims 1 to 11 wherein said elastic resilient element (10) has holding means (32) for holding said shut-off valve (6) in an opened position, when said drinking or pouring aperture is opened.

13. Intermediate element according to claim 12 further comprising other engaging means (88) for engaging with said holding means (32).

14. Intermediate element according to any one of claims 1 to 13 wherein said shut-off valve (6) is asymmetric.

15. Intermediate element according to any one of claims 1 to 14 wherein said elastic resilient element (10) is asymmetric.

16. Intermediate element according to anyone of claims 1 to 15 further comprising a plurality of protrusions (82,82a,82b) for stacking a set of said can ends.

17. Can end (2) comprising an intermediate element according to any one of claims 1 to 16.

18. Can end (2) according to claim 17 further comprising a cap top (3), arranged in connection to a pull tab (4) configured to remove said cap top from said can end along a pre-defined groove, to thereby create said drinking or pouring aperture, wherein said cap top (3) is configured to remain located, after said removal, on top of said shut-off valve (6).

19. A metal beverage can optionally for carbonated drinks, comprising said can body (1) and a can end (2) according to claim 17 or claim 18.

20. A method for producing the can according to claim 19, the method comprising the steps of:
- producing a can end (2) according to claim 17 or claim 18;
- producing the can body (1);
- attaching the can end to the can body.

21. Method according to claim 20 further comprising producing said intermediate element (80) by injection molding.

22. Method according to claim 20 or claim 21 further comprising seaming said intermediate element (80) to said can end (2) and to said can body (1).

23. A method for using a reclosing metal beverage can, optionally for carbonated drinks, said can comprising a can body (1) and a can end (2) according to claim 18.

24. Method according to claim 23, the method comprising the steps of:
    - actuating said pull tab (4), thus removing said cap top (3) of said can end (2) along said predetermined groove, thereby creating said drinking or pouring aperture;
    - resiliently opening, by said actuating said pull tab (4), said shut-off valve (6), wherein said removed cap top (3) remains located on top of said shut-off valve (6).

[CLAIMS]

1. An intermediate element for a can end for a metal beverage can, wherein said intermediate element is adapted to be immovably attached to said can end for shielding said can end circumferentially from the interior of said can, thus preventing the contents of said can from circumferentially passing said intermediate element to contact said can end, before use of said can by a customer and when drinking or pouring the contents of said can by said customer, wherein said intermediate element further comprises:
   - a shut-off valve for sealing a drinking or pouring aperture of said can, wherein said drinking or pouring aperture is for said drinking or pouring the contents of said can; and
   - an elastic resilient element for resiliently operating said shut-off valve;

   wherein said shut-off valve is configured to seal said drinking or pouring aperture by contacting said intermediate element.

2. Intermediate element according to claim 1 wherein said intermediate element has a side for contacting said contents of said can before said use of said can by said customer and wherein said shut-off valve is configured to seal said drinking or pouring aperture by contacting said side of said intermediate element.

3. Intermediate element according to claim 1 wherein said intermediate element is adapted to be immovably attached to said can end by seaming.

4. Intermediate element according to claim 3 comprising a circumferential portion for said seaming said intermediate element to said can end.

5. Intermediate element according to claim 1 wherein said intermediate element is adapted to be immovably attached to said can end by an adhesive, or by riveting, or by clamping, or by snapping, or by crimping, or

by a combination of these.

6. Intermediate element according to claim 5 comprising a sealing element for said shielding said can end circumferentially from the interior of the can, wherein said sealing element is attached to said intermediate element.

7. Intermediate element according to claim 1 wherein said intermediate element is made by injection molding.

8. Intermediate element according to claim 1 wherein said intermediate element is at least substantially made of at least one plastic material or of at least one metal.

9. Intermediate element according to claim 1 wherein said shut-off valve is at least substantially made of at least one metal or of at least one plastic material.

10. Intermediate element according to claim 1 wherein said elastic resilient element has a holding element for holding said shut-off valve in an opened position, when said drinking or pouring aperture is opened.

11. Intermediate element according to claim 10 further comprising an engaging element for engaging with said holding element.

12. Intermediate element according to claim 1 wherein said shut-off valve is asymmetric or wherein said elastic resilient element is asymmetric.

13. Intermediate element according to claim 1 further comprising a plurality of protrusions for stacking a set of said can ends.

14. Can end comprising an intermediate element according to claim 1.

15. Can end according to claim 14 further comprising a cap top, arranged in connection to a pull tab configured to remove said cap top from a top portion of said can end along a pre-defined groove on the top portion, to thereby create said drinking or pouring aperture, wherein said cap top is configured to remain located, after said removal, on top of said shut-off valve.

16. A metal beverage can, comprising a can body and a can end according to claim 14.

17. A method for producing a metal beverage can, the can comprising a can body and a can end, the method comprising:
    - producing the can end for the metal beverage can, said can end comprising an intermediate element, wherein the intermediate element is adapted to be immovably attached to said can end for shielding said can end circumferentially from the interior of said can, thus preventing the contents of said can from circumferentially passing said intermediate element to contact said can end, before use of said can by a customer and when drinking or pouring the contents of said can by said customer, wherein said intermediate element further comprises: a shut-off valve for sealing a drinking or pouring aperture of said can, wherein said drinking or pouring aperture is for said drinking or pouring the contents of said can; and an elastic resilient element for resiliently operating said shut-off valve; and wherein said shut-off valve is configured to seal said drinking or pouring aperture by contacting said intermediate element;
    - producing the can body;
    - attaching the can end to the can body.

18. Method according to claim 17 further comprising producing said intermediate element by injection molding.

19. Method according to claim 17 further comprising seaming said intermediate element to said can end and to said can body.

20. A method for using a reclosing metal beverage can, said can comprising a can body and a can end, said can end comprising an intermediate element, wherein the intermediate element is adapted to be immovably attached to said can end for shielding said can end circumferentially from the interior of said can, thus preventing the contents of said can from circumferentially passing said intermediate element to contact said can end, before use of said can by a customer and when drinking or pouring the contents of said can by said customer, wherein said intermediate element further comprises: a shut-off valve for sealing a drinking or pouring aperture of said can, wherein said drinking or pouring aperture is for said drinking or pouring the contents of said can; and an elastic resilient element for resiliently operating said shut-off valve; and wherein said shut-off valve is configured to seal said drinking or pouring aperture by contacting said intermediate element; the method comprising:
    - actuating a pull tab of said can end, thus removing a cap top from a top portion of said can end along a predetermined groove of said can end, thus creating said drinking or pouring aperture;
    - resiliently opening, by said actuating said pull tab, said shut-off valve, wherein said removed cap top remains located on top of said shut-off valve.