

DESCRIPTION

Title of Invention: NOZZLE-CAP-EQUIPPED CONTAINER

Technical Field

[0001]

5 The present invention relates to a nozzle-cap-equipped container, and in particular, relates to a nozzle-cap-equipped container with a nozzle cap attached to a mouth and neck portion of a container body for discharging content liquid by pressing a barrel portion.

Background Art

10 [0002]

 There has been generally known a squeeze container as a container for discharging content liquid with pressing of a barrel portion of a container body. According to such a squeeze container, owing to that the barrel portion of the bottle-shaped container body made of flexible synthetic resin, for example, is pressed in a state that a top discharge opening of a nozzle portion of a nozzle cap attached to a neck portion of the container body is directed to a position for discharging while the container body which stores content liquid is tilted, content liquid can be discharged continuously and linearly from the top discharge opening as increasing inner pressure thereof (see Patent Literature 1).

20 [0003]

 Further, the nozzle cap of the squeeze container includes a discharge guide flow passage having a fair length at a nozzle portion. Owing to that content liquid is discharged from the top discharge opening as passing through the discharge guide flow passage, content liquid can be discharged continuously and linearly in a stable state while being directed in an extension direction of the discharge guide flow passage.

Citation List

Patent Literature

[0004]

Patent Literature 1: JP 2008-24339 A

Summary of Invention

[0005]

5 The present invention provides a nozzle-cap-equipped container with a nozzle cap in which a container body has a neck-curved bottle shape with a neck portion tilted to one side against a longitudinal center axis of a barrel portion, and a nozzle cap is attached to a mouth and neck portion of the container body for discharging content liquid by pressing the barrel portion. Here, a nozzle portion of the nozzle cap includes a discharge guide flow passage through which content liquid is discharged continuously and linearly
10 from a top discharge opening when the barrel portion is pressed, and the discharge guide flow passage includes a taper-shaped portion having flow passage cross-sectional area enlarged from the container body side toward the top discharge opening side.

Brief Description of Drawings

[0006]

15 [Fig. 1] Fig. 1 is a front view of a nozzle-cap-equipped container according to a preferable embodiment of the present invention.

[Fig. 2] Fig. 2 is a cross-sectional view of a mouth and neck portion of a container body to which a nozzle cap is attached.

[Fig. 3] Fig. 3 is a cross-sectional view of the nozzle cap.

20 [Fig. 4(a)] Fig. 4(a) is a perspective view schematically illustrating operation in which a top discharge opening of a nozzle portion is directed toward an inner overhanging stepped portion of a Western-style toilet bowl while holding the nozzle-cap-equipped container.

25 [Fig. 4(b)] Fig. 4(b) is a perspective view schematically illustrating operation in which the top discharge opening of the nozzle portion is directed toward the inner overhanging stepped portion of the Western-style toilet bowl while holding the nozzle-cap-equipped container.

Description of Embodiments

[0007]

30 In a squeeze container for discharging content liquid with pressing of a barrel

portion of a container body, the barrel portion of the container body is flexible. Therefore, when stored content liquid is fed to a mouth and neck portion as tilting the container body for discharging content liquid, there may be a case that content liquid filled as being fed to an inner region of the mouth and neck portion is discharged from a top discharge opening of a nozzle portion of a nozzle cap accidentally and forcefully to dirty surroundings with pressure of a hand or fingers holding the barrel portion received by the container body in a state without active pressing before squeezing the barrel portion.

[0008]

Particularly, when the container body storing liquid detergent for toilet cleaning adopts a squeeze container having a so-called neck-curved bottle shape, for example, as a shape which facilitates discharging of detergent toward an inner overhanging stepped portion of an opening circumferential portion of a Western-style toilet bowl from an obliquely lower side (see Figs. 4(a) and 4(b)), there may be a case that content liquid is discharged accidentally and forcefully from the top discharge opening and splashed outward from the Western-style toilet bowl in mid-course of operation to direct the top discharge opening of the nozzle portion of the nozzle cap toward the inner overhanging stepped portion of the Western-style toilet bowl while tilting the container body.

[0009]

The present invention relates to a nozzle-cap-equipped container which effectively suppresses accidental and forceful discharging of content liquid from a top discharge opening of a nozzle portion of a nozzle cap which is attached to a mouth and neck portion of a container body for discharging content liquid with pressing of a barrel portion in a state without active pressing before squeezing the barrel portion.

[0010]

According to the present invention, in a nozzle-cap-equipped container, a container body includes a neck-curved bottle shape with a neck portion tilted to one side against a longitudinal center axis of a barrel portion, and a nozzle cap is attached to a mouth and neck portion of the container body for discharging content liquid with pressing of the barrel portion. Here, a nozzle portion of the nozzle cap includes a discharge guide

flow passage through which content liquid is discharged continuously and linearly from a top discharge opening when the barrel portion is pressed, and the discharge guide flow passage includes a taper-shaped portion having flow passage cross-sectional area enlarged from the container body side toward the top discharge opening side.

5 [0011]

As illustrated in Fig. 1, a nozzle-cap-equipped container 10 according to a preferable embodiment of the present invention includes a bottle-shaped container body 11 made of synthetic resin and storing, for example, liquid detergent for toilet cleaning as content liquid, and a nozzle cap 14 which is integrally attached to a mouth and neck portion 12 of the container body 11. Further, in the nozzle-cap-equipped container 10 of the present embodiment, a barrel portion 13 of the container body 11 functioning as a squeeze container has flexibility as being elastically deformable in a direction in which a front-back pair of front wall portions 13a is mutually closed. Content liquid can be discharged from a top discharge opening 15a of a nozzle portion 15 of the nozzle cap 14 owing to that pressure is applied to the inside of the container body 11 with squeeze deformation while pressing as sandwiching the pair of front wall portions 13a in a state that the barrel portion 13 is held and tilted. Further, the nozzle-cap-equipped container 10 has a function to effectively suppress accidental and forceful discharging of content liquid from the top discharge opening 15a of the nozzle portion 15 in a state without active pressing before squeezing the barrel portion 13 in mid-course of operation, for example, to direct the top discharge opening 15a of the nozzle portion 15 of the nozzle cap 14 toward a position for discharging while tilting the container body 11 (see Figs. 4(a) and 4(b)).

[0012]

25 Further, as illustrated in Fig. 1, the nozzle-cap-equipped container 10 of the present embodiment is a squeeze-deformable container in which the container body 11 has a neck-curved bottle shape with a neck portion 13b tilted to one side against a longitudinal center axis C of the barrel portion 13 and the nozzle cap 14 is attached to the mouth and neck portion 12 of the container body 11 for discharging content liquid with pressing of the barrel portion 13. As illustrated in Figs. 2 and 3, the nozzle portion 15 of the nozzle cap 14 includes a discharge guide flow passage 16 through which content liquid is discharged continuously and linearly from the top discharge opening 15a when

the barrel portion 13 is pressed. Further, the discharge guide flow passage 16 includes a taper-shaped portion 16a having flow passage cross-sectional area enlarged from the container body 11 side toward the top discharge opening 15a side.

[0013]

5 Further, in the present embodiment, the container body 11 has the neck-curved bottle shape with the neck portion 13b protruded as being tilted to one side against the longitudinal center axis C of the barrel portion 13, and has a curved ridge portion 13e which is formed from a bottom portion 17 to the neck portion 13b. Content liquid in the container body is flown along the shape of the curved ridge portion 13e and is forcefully
10 contacted to the nozzle portion 15 with usage as holding the barrel portion 13 at the neck-curved side or the opposite side to the neck-curved side against the longitudinal center axis C.

[0014]

15 Further, in the present embodiment, it is preferable that the discharge guide flow passage 16 has an inner diameter in a range of 1 to 10 mm and a flow passage length in a range of 17 to 60 mm. Content liquid is to be discharged as being guided along the discharge guide flow passage 16.

[0015]

20 In the present embodiment, the container body 11 is a blow molding component made of synthetic resin such as highly-polymerized compound and has a squeeze-deformable bottle shape. As illustrated in Fig. 1, the container body 11 is structured with the barrel portion 13, the mouth and neck portion 12 and the bottom portion 17. With the bottom portion 17 placed on a base face, the container body 11 can be displayed in a store or stored at home in a standing state. The barrel portion 13 of the
25 container body 11 has a hollow cross-sectional shape being flat and approximately ellipsoidal or oval having a long axis and a short axis, for example. The barrel portion 13 of the container body 11 includes a taper-shaped neck portion 13b having the hollow cross-sectional shape gradually decreased in diameter while the center position thereof at the upper end section being opposite to the bottom portion 17 is decentered to one end
30 side of the long axis from the longitudinal center axis C of the barrel portion 13.

Further, as illustrated in Figs. 4(a) and 4(b), the container body 11 has a so-called neck-curved bottle shape, for example, as a shape which facilitates discharging of liquid detergent for toilet cleaning toward an inner overhanging stepped portion 51 of an opening circumferential portion of a Western-style toilet bowl 50 from an obliquely lower side.

[0016]

That is, in the present embodiment, as illustrated in Fig. 1, the container body 11 has the neck-curved bottle shape in which the mouth and neck portion 12 continued to the top end of the neck portion 13b is tilted and protruded from a position of being laterally decentered against the longitudinal center axis C of the barrel portion 13 to a direction opposite to the decentered direction. Further, in the present embodiment, at the neck portion 13b being taper-shaped at an upper end section, the container body 11 is shaped so that a side face at one end side to which the neck portion 13b is decentered is joined to a base end part of the mouth and neck portion 12 via a curved convex face 13c being a smooth curved face with a longitudinal cross-section convexed outward. Further, the container body 11 is shaped so that a side face at the other end side is joined to the base end part of the mouth and neck portion 12 via a curved concave face 13d being a smooth curved face with a longitudinal cross-section concaved inward. Accordingly, when the container body 11 is tilted so that the mouth and neck portion 12 protruded as being obliquely tilted is located to the lower side, content liquid stored in the container body 11 can be forcefully fed toward the mouth and neck portion 12 to which the nozzle cap 14 is attached while being flown down smoothly via an inner face of the ridge portion 13e of the curved convex face 13c of the neck portion 13b being the tapered portion.

[0017]

In the present embodiment, the nozzle cap 14 is an injection-molding component made of synthetic resin such as highly-polymerized compound. As illustrated in Figs. 2 and 3, the nozzle cap 14 is structured with a circular fit engaging portion 18, a liquid trap concave portion 19 which is formed below an inner wall portion 18a of the circular fit engaging portion 18, and the nozzle portion 15 which is arranged as being stood integrally from a center section of a bottom wall portion 19a of the liquid trap concave portion 19.

[0018]

The circular fit engaging portion 18 has a cross-sectional shape which is approximately U-shaped formed with the inner wall portion 18a, an upper wall portion 18b and an outer wall portion 18c. An engaging convex rib 18d is arranged at a lower end inner circumferential face of the outer wall portion 18c. Owing to that the engaging convex rib 18d is engaged with an engaged convex rib 12a which is arranged at a top outer circumferential face of the mouth and neck portion 12 of the container body 11, the nozzle cap 14 is attached and fixed to the mouth and neck portion 12 of the container body 11 in a state that a top end part of the mouth and neck portion 12 is sandwiched between the inner wall portion 18a and the outer wall portion 18c and that a top end face of the mouth and neck portion 12 is abutted against a lower face of the upper wall portion 18b.

[0019]

The liquid trap concave portion 19 is formed as being enclosed with an inner cylindrical wall portion 19b which is arranged continuously below the inner wall portion 18a of the circular fit engaging portion 18 and the bottom wall portion 19a which is arranged continuously at a lower end part of the inner cylindrical wall portion 19b. For example, when the container body 11 is returned into a standing state with releasing of pressing after being tilted and squeeze-deformed to discharge a specific amount of content liquid from the top discharge opening 15a of the nozzle portion 15, content liquid dripping downward along an outer circumferential face of the nozzle portion 15 is trapped at the liquid trap concave portion 19. Accordingly, it is possible to effectively prevent content liquid dripped along the outer circumferential face of the nozzle portion 15 from sticking to an outer circumferential face of the mouth and neck portion 12. Further, the nozzle portion 15 stands in a state of being apart from the inner cylindrical wall portion 19b as being supported by the bottom wall portion 19a of the liquid trap concave portion 19.

[0020]

The nozzle portion 15 is a cylindrical section being long and hollow, and has the discharge guide flow passage 16 formed inside. In the present embodiment, the nozzle portion 15 is arranged as being stood from the center section of the bottom wall portion 19a which forms the liquid trap concave portion 19 in a state of being protruded to have a

fair height from a top opening face of the mouth and neck portion 12 and penetrating the bottom wall portion 19a with a lower end section being extended below the bottom wall portion 19a. Accordingly, the discharge guide flow passage 16 of the nozzle portion 15 is arranged in a state that a rear end inlet opening 16b is located at an inner region of the mouth and neck portion 12 being an inner region of the container body 11. Further, the nozzle cap 14 is attached to the mouth and neck portion 12 of the container body 11 so that the axial direction of the discharge guide flow passage 16 of the nozzle portion 15 is matched or approximately matched with the axial direction of the mouth and neck portion 12 of the container body 11 in a state of being attached and fixed to the mouth and neck portion 12 of the container body 11.

[0021]

Owing to that the rear end inlet opening 16b of the discharge guide flow passage 16 of the nozzle portion 15 is located at the inner region of the container body 11 (mouth and neck portion 12), it is possible to prevent occurrence of liquid splashing by reducing pressure of content liquid to be applied to the rear end inlet opening 16b of the nozzle portion 15.

[0022]

Further, in the present embodiment, the nozzle portion 15 of the nozzle cap 14 has a length in a range of 17 to 60 mm. Accordingly, the discharge guide flow passage 16 formed as penetrating the nozzle portion 15 in the longitudinal direction has a flow passage length in a range of 17 to 60 mm as well and has an inner diameter in a range of 1 to 10 mm. According to the above, in a case that content liquid is to be discharged from the top discharge opening 15a of the nozzle portion 15 as tilting the container body 11 and pressing the barrel portion 13, content liquid can be discharged continuously and linearly in a stable state while the discharge direction is directed in the extended direction of the discharge guide flow passage 16 owing to that content liquid is discharged after being passed through the discharge guide flow passage 16 having a fair length.

[0023]

Further, in the present embodiment, the discharge guide flow passage 16 formed as penetrating the nozzle portion 15 in the longitudinal direction is formed as the

taper-shaped portion 16a, preferably over the entire length, having flow passage cross-sectional area enlarged from the container body 11 side toward the top discharge opening 15a side.

[0024]

5 Here, the taper-shaped portion 16a of the discharge guide flow passage 16 has a taper angle against the axial direction of the discharge guide flow passage 16 being in a range of 0.5° to 10° preferably, in a range of 0.5° to 5° more preferably, and in a range of 0.5° to 1° even more preferably. Owing to arrangement of the taper-shaped portion 16a of the discharge guide flow passage 16 having a taper angle in a range of 0.5° to 10° , it is
10 possible to effectively prevent liquid splashing from the nozzle when the container is tilted.

[0025]

Further, as illustrated in Fig. 2, the present embodiment includes a cover cap 20 which is attached in a detachably attachable manner to cover the nozzle portion 15 of the
15 nozzle cap 14 when the nozzle-cap-equipped container 10 is not used. The cover cap 20 includes a cover body portion 21 having an approximate truncated cone shape, and an attaching skirt portion 22 having an approximately cylindrical shape extended downward continuously from an lower end part of the cover body portion 21. The cover cap 20 is attached to cover the mouth and neck portion 12 of the container body 11 in a state that
20 the top discharge opening 15a of the nozzle portion 15 is closed with an upper inner face of the cover body portion 21, for example, owing to that a screw protrusion stripe 22a arranged at an inner face of the attaching skirt portion 22 is screwed to a screw protrusion stripe 12c arranged at an outer circumferential face of the mouth and neck portion 12 of the container body 11. Further, an inner ring portion 21a is arranged as being protruded
25 downward from the upper inner face of the cover body portion 21. When the cover cap 20 is attached to cover the mouth and neck portion 12 of the container body 11, the top discharge opening 15a can be closed in a strongly liquid-stopped state owing to that the inner ring portion 21a is fitted along an inner circumferential section of the top discharge opening 15a of the nozzle portion 15. Further, an abutting ring portion 21b is arranged
30 as being protruded downward from a center inner face of the cover body portion 21. When the cover cap 20 is attached to cover the mouth and neck portion 12 of the container body 11, a top end of the abutting ring portion 21b is abutted against the top end

of the mouth and neck portion 12 as sandwiching the upper wall portion 18b of the circular fit engaging portion 18 of the nozzle cap 14. Accordingly, it is possible to effectively prevent the inner ring portion 20d and the top end part of nozzle portion 15 from being broken with excessive screwing of the attaching skirt portion 20 to the mouth and neck portion 12.

[0026]

According to the nozzle-cap-equipped container 10 having the abovementioned structure, in a state without active pressing before squeezing the barrel portion 13, it is possible to effectively suppress accidental and forceful discharging of content liquid from the top discharge opening 15a of the nozzle portion 15 of the nozzle cap 14 which is attached to the mouth and neck portion 12 of the container body 11 for discharging content liquid with pressing of the barrel portion 13.

[0027]

According to the present embodiment, the discharge guide flow passage 16 which is formed inside the nozzle portion 15, and through which content liquid is guided and discharged continuously and linearly from the top discharge opening 15a with pressing of the barrel portion 13 includes the taper-shaped portion 16a having flow passage cross-sectional area enlarged from the container body 11 side toward the top discharge opening 15a side. Therefore, compared to structures in which a discharge guide flow passage through which content liquid is guided and discharged continuously and linearly from a top discharge opening is shaped linearly without variation of cross-sectional area and has a taper shape with flow passage cross-sectional area lessened toward a top discharge opening side, the nozzle-cap-equipped container 10 of the present embodiment enables a flow speed of content liquid passing through the flow passage to be effectively decreased as approaching to the top discharge opening 15a. According to the above, at the time of discharging content liquid, it is possible to effectively prevent content liquid filled as being fed to the inner region of the mouth and neck portion 12 with tilting of the container body 11 from being discharged from the top discharge opening 15a of the nozzle portion 15 accidentally and forcefully to dirty surroundings with pressure of a hand or fingers holing the barrel portion 13 received by the container body 11 in a state without active pressing before squeezing the barrel portion 13.

[0028]

Further, particularly, in the present embodiment, the container body 11 forms a squeeze container having the so-called neck-curved bottle shape, for example, as a shape which facilitates discharging of liquid detergent for toilet cleaning toward the inner overhanging stepped portion 51 of the opening circumferential portion of the Western-style toilet bowl 50 from an obliquely lower side. When the container body 11 is tilted so that the mouth and neck portion 12 protruded as being obliquely tilted is located to the lower side, content liquid stored in the container body 11 is forcefully fed toward the mouth and neck portion 12 while being flown down smoothly via the inner face of the curved convex face 13c of the tapered portion 13b. Further, the container body 11 has the neck-curved bottle shape with the neck portion 13b protruded as being tilted to one side against the longitudinal center axis C of the barrel portion 13, so that the curved ridge portion 13e is formed from the bottom portion 17 to the neck portion 13b. In a case of usage with holding the barrel portion 13 at the neck-curved side or the opposite side to the neck-curved side against the longitudinal center axis C, content liquid in the bottle is flown along the shape of the curved ridge portion 13e and is forcefully contacted to the nozzle portion 15 (see Figs. 4(a) and 4(b)). However, in the present embodiment, since the discharge guide flow passage 16 formed inside the nozzle portion 15 is structured as described above, it is possible to effectively prevent content liquid from being discharging from the top discharge opening 15a accidentally and forcefully and from being splashed outward from the Western-style toilet bowl 50 in mid-course of operation to direct the top discharge opening 15a of the nozzle portion 15 of the nozzle cap 14 toward the inner overhanging stepped portion 51 of the Western-style toilet bowl 50 while tilting the container body 11.

[0029]

Here, not limited to the abovementioned embodiment, the present invention may be modified variously. For example, a discharge guide flow passage is not necessarily required to have a taper-shaped portion having flow passage cross-sectional area enlarged from a container body side to a top discharge opening side over the entire length. The similar operational effects can be obtained as well in a case that a taper-shaped portion is formed at a part thereof over a fair length region. Further, a container body is not necessarily required to have a neck-curved bottle shape. Other than liquid detergent for toilet cleaning, various types of content liquid such as other liquid detergent and liquid for

human consumption may be used as content liquid to be stored in a container body.

[0030]

In relation to the above-mentioned embodiments, the present invention further discloses the following nozzle-cap-equipped container.

5 [0031]

[1] A nozzle-cap-equipped container with a nozzle cap in which a container body includes a neck-curved bottle shape with a neck portion tilted to one side against a longitudinal center axis of a barrel portion, and a nozzle cap is attached to a mouth and neck portion of the container body for discharging content liquid by pressing the barrel
10 portion, wherein

a nozzle portion of the nozzle cap includes a discharge guide flow passage through which content liquid is discharged continuously and linearly from a top discharge opening when the barrel portion is pressed, and

the discharge guide flow passage includes a taper-shaped portion having flow
15 passage cross-sectional area enlarged from the container body side toward the top discharge opening side, the taper-shaped portion has a taper angle being in a range of 0.5° to 10°.

[0032]

[2] The nozzle-cap-equipped container set forth in [1], wherein the container body
20 has the neck-curved bottle shape with the neck portion protruded as being tilted to one side against the longitudinal center axis of the barrel portion, and has a curved ridge portion which is formed from a bottom portion to the neck portion, and content liquid in the container body is flown along a shape of the curved ridge portion and is forcefully contacted to the nozzle portion with usage as holding the barrel portion at a neck-curved
25 side or an opposite side to the neck-curved side against the longitudinal center axis.

[0033]

[3] The nozzle-cap-equipped container set forth in [1] or [2], wherein the nozzle cap is attached to the mouth and neck portion of the container body in such a manner that the axial direction of the discharge guide flow passage is matched or approximately matched

with the axial direction of the mouth and neck portion.

[4] The nozzle-cap-equipped container set forth in any one of [1] to [3], wherein the discharge guide flow passage has an inner diameter in a range of 1 to 10 mm and a flow passage length in a range of 17 to 60 mm

5 [5] The nozzle-cap-equipped container set forth in any one of [1] to [4], wherein the barrel portion has a hollow cross-sectional shape being flat and approximately ellipsoidal or oval having a long axis and a short axis.

[6] The nozzle-cap-equipped container set forth in any one of [1] to [5], wherein the content liquid is a liquid detergent for toilet cleaning.

10 Industrial Applicability

[0034]

According to a nozzle-cap-equipped container of the present invention, it is possible to effectively suppress accidental and forceful discharging of content liquid from a top discharge opening of a nozzle portion of a nozzle cap which is attached to a mouth
15 and neck portion of a container body for discharging content liquid with pressing of a barrel portion in a state without active pressing before squeezing the barrel portion.

CLAIMS

1. A nozzle-cap-equipped container with a nozzle cap in which a container body includes a neck-curved bottle shape with a neck portion tilted to one side against a longitudinal center axis of a barrel portion, and a nozzle cap is attached to a mouth and neck portion of the container body for discharging content liquid by pressing the barrel portion, wherein

a nozzle portion of the nozzle cap includes a discharge guide flow passage through which content liquid is discharged continuously and linearly from a top discharge opening when the barrel portion is pressed, and

the discharge guide flow passage includes a taper-shaped portion having flow passage cross-sectional area enlarged from the container body side toward the top discharge opening side.

2. The nozzle-cap-equipped container according to claim 1, wherein

the container body has the neck-curved bottle shape with the neck portion protruded as being tilted to one side against the longitudinal center axis of the barrel portion, and has a curved ridge portion which is formed from a bottom portion to the neck portion, and

content liquid in the container body is flown along a shape of the curved ridge portion and is forcefully contacted to the nozzle portion with usage as holding the barrel portion at a neck-curved side or an opposite side to the neck-curved side against the longitudinal center axis.

3. The nozzle-cap-equipped container according to claim 1 or 2, wherein

the discharge guide flow passage has an inner diameter in a range of 1 to 10 mm and a flow passage length in a range of 17 to 60 mm, and

content liquid is discharged as being guided along the discharge guide flow passage.

4. The nozzle-cap-equipped container according to any one of claims 1 to 3, wherein

the container body has a neck-curved bottle shape in which the mouth and neck

portion is tilted and protruded from a position of being laterally decentered against the longitudinal center axis of the barrel portion to a direction opposite to the decentered direction.

5 5. The nozzle-cap-equipped container according to any one of claims 1 to 4,
wherein

 the taper-shaped portion of the discharge guide flow passage has a taper angle against an axial direction of the discharge guide flow passage being in a range of 0.5° to 10°.

10 6. The nozzle-cap-equipped container according to any one of claims 1 to 5,
wherein

 the discharge guide flow passage has a rear end inlet opening arranged at an inner region of the container body.