

INTERMEDIATE BULK CONTAINER

BACKGROUND OF THE INVENTION

Field of the Invention

5 The present invention relates to an intermediate bulk container which can contain and store dangerous articles such as liquid chemicals or other various kinds of liquid contents and can be vertically stacked and, more specifically, to an intermediate bulk container, wherein most of components except
10 for vertical support bars in the intermediate bulk container, which is formed in a size capable of containing approximately one ton of content, are made of a synthetic resin material so as to reduce the total weight of the intermediate bulk container, thereby reducing manufacturing costs, and a container body made
15 of a synthetic resin material is prevented from being ruptured or damaged, even though such intermediate bulk containers each containing approximately one ton of content are stacked in a plurality of layers, such that the stacked state can be maintained stably.

20 **Background Art**

There is prior art relating to the present invention and the technical details thereof have been disclosed in Korean Utility Model Reg. Publication No. 20-0290491 (title: liquid receiving tank and stacking case thereof) and the like.

5 As shown in Fig. 1 and Fig. 2, the prior art device forms a liquid receiving tank 1, comprising a tank main body 10, which forms a liquid receiving space provided with an injection hole and a discharge hole, has a stiffness reinforcement stepped part provided on a plate surface at least in the area of the
10 injection hole, and is provided with a liquid receiving vinyl received in the liquid receiving space so as to be withdrawn through the injection hole, a cap 11 for opening or closing the injection hole of the tank main body 10, and a cock valve body 12 fixedly coupled to the discharge hole of the tank main body
15 10.

In addition, a stacking case C is provided, and includes a palette 30 for supporting the liquid receiving tank 1 thereon and having insertion parts formed on side surfaces so as to be inserted by the fork of a forklift, and a frame 20 coupled to
20 the upper part of the palette 30 in the vertical direction and having a plurality of ring-shaped traverse bars 21 arranged in parallel to each other in the vertical direction so as to incorporate the liquid receiving tank 1 therein, a plurality of

longitudinal bars 22 for connecting the traverse bars 21, and support bars 25 fixedly coupled to the lower one of the traverse bars 24, wherein a plurality of the stacking cases C can be stacked together.

5 According to this prior art device, the stacking case C is made by mounting the frame 20 in the shape of a cage on the palette 30 made of steel, and the tank main body 10 made of synthetic resin is simply placed in the stacking case C through the open top part of the stacking case C.

10 The prior art device as above has disadvantages of the increase of the logistics costs due to the large volume and heavy weight and the increase of manufacturing costs of the stacking case C since the stacking case C made of steel is formed to be large so as to receive the tank main body 10
15 therein with a sufficient margin such that liquid content can be maintained and delivered in a state, where the liquid content is received in the tank main body 10.

SUMMARY OF THE INVENTION

20 Accordingly, the present invention has been made to solve the above-mentioned problems occurring in the prior arts, and it is an objective of the present invention to provide an

intermediate bulk container by mounting an upper cover and a lower base respectively on the upper and lower parts of a container body and mounting vertical support bars and horizontal support bands mounted on the outer circumference of the container body between the upper cover and the lower base, wherein most of components except for the vertical support bars are made of a synthetic resin material, thereby reducing the weight of the intermediate bulk container as well as the manufacturing costs thereof.

Further, it is another objective of the present invention to provide an intermediate bulk container, wherein, when each intermediate bulk container is stacked in the vertical direction, the upper cover of an intermediate bulk container at one side and the lower base of an intermediate bulk container at the other side, which corresponds to the upper cover, are fitted with each other such that the each intermediate bulk container stacked in the vertical direction can be maintained in a stable state.

Furthermore, it is still another objective of the present invention to provide an intermediate bulk container, wherein the vertical support bars and the horizontal support bands are respectively fitted in horizontal and vertical mounting grooves, which are formed on the outer circumferential surface of the

container body, so as to stably support the container body, thereby preventing the expansion of the container body, which is made of a synthetic resin material, as well as preventing the increase of the whole volume of the intermediate bulk container.

5 To accomplish the above objectives, according to one aspect of the present invention, there is provided an intermediate bulk container, comprising: a plurality of vertical mounting grooves, which are placed at certain intervals in a circumferential direction of the container, and which are formed in a
10 longitudinal direction of the container; a plurality of vertical support bars mounted on the vertical mounting grooves; a plurality of horizontal mounting grooves, which are placed at certain intervals in the longitudinal direction of the container, and which are formed in the circumferential direction of the
15 container; and a plurality of horizontal support bands mounted on the horizontal mounting grooves, wherein the vertical support bars and the horizontal support bands are installed so as to cross each other.

In addition, the vertical support bars support a load
20 applied in the vertical direction of the container and the horizontal support bands support force to be expanded in the circumferential direction of the container.

Further, the intermediate bulk container further comprises:
an upper cover fitted into the upper part of the container, and
having a plurality of support bar coupling parts, to which the
upper end parts of the vertical support bars are inserted and
5 coupled, formed at intervals in the circumferential direction;
and a lower base fitted into the lower part of the container,
and having a plurality of support bar coupling parts, to which
the lower end parts of the vertical support bars are inserted
and coupled, formed at intervals in the circumferential
10 direction at positions corresponding to the support bar coupling
parts of the upper cover.

Further, fitting protrusions are formed to be protruded at
both sides of the upper cover, and fitting grooves are formed at
both sides of the lower base at positions corresponding to the
15 forming positions of the fitting protrusions.

Further, when stacking intermediate bulk containers, the
intermediate bulk containers are stacked in such a manner that
the fitting protrusions of an intermediate bulk container at a
lower side are fitted into the fitting grooves of an
20 intermediate bulk container at an upper side.

Further, the container, the upper cover and the lower base are made of a synthetic resin material, and the vertical support bars are made of a metal material.

Further, the vertical support bars are made of a metal pipe
5 into the shape of a semi-circular pipe, a rectangular pipe, a circular pipe or an oval pipe.

Further, the horizontal support bands are made by weaving synthetic fiber, or of a synthetic resin material or a metal material.

10 Further, upper and lower fitting parts are formed at the upper part and the lower part of the container and have a diameter, which reduces by the thickness of the outer wall parts of the upper cover and the lower base.

To accomplish the above objectives, according to another
15 aspect of the present invention, there is provided an intermediate bulk container, comprising: a container body having a cap provided to an injection hole, which is formed in the upper part of the container body, so as to open or close the injection hole, a discharge hole formed in the inner wall of a
20 valve mounting groove, which is formed to be dented at the lower side of the front part of the container, and a discharge valve provided to the discharge hole; an upper cover provided in the

shape of a cap to the upper part of the container body, and having a through hole formed at a position corresponding to the cap, fitting protrusions formed to be protruded at both sides of a top surface, and a plurality of support bar coupling parts
5 formed at intervals on the entire outer circumference so as to be inserted by the upper end parts of vertical support bars; a lower base fitted to be provided to the lower part of the container body, and having forklift fork insertion grooves formed at both sides of the lower part so as to be inserted by a
10 forklift fork, a plurality of support bar coupling parts formed on the entire outer circumference at positions corresponding to the support bar coupling parts of the upper cover so as to be inserted by the lower end parts of the vertical support bars, and fitting grooves formed to be fitted with fitting protrusions
15 of an intermediate bulk container to be stacked at a lower side when stacking intermediate bulk containers; the vertical support bars provided and coupled by screws in a state, where upper and lower end parts are respectively fitted into the support bar coupling parts of the upper cover and the support bar coupling
20 parts of the lower base, which are inserted into the upper and lower parts of the container body; and a plurality of horizontal support bands provided so as to tighten the entire outer circumferential surface of the container body, including the

outer circumferential surfaces of the vertical support bars provided at intervals in the vertical direction on the outer circumferential surface of the container body.

Further, upper and lower fitting parts are formed at the
5 upper part and the lower part of the container body and have a diameter, which reduces by the thickness of the outer wall parts of the upper cover and the lower base, vertical mounting grooves and horizontal mounting grooves are formed on the outer circumference of the container body so as to be inserted by the
10 vertical support bars and the horizontal support bands, and a plurality of inward ribs are formed on the top surface of the container body.

Further, a plurality of support bar insertion grooves are formed at the upper part of the lower base in the horizontal
15 direction, and bottom support bars are provided to each of the support bar insertion grooves so as to support the lower part of the container body.

An intermediate bulk container according to the present invention as described above can reduce the weight of the
20 intermediate bulk container and decrease the manufacturing costs thereof by forming the intermediate bulk container by respectively mounting the upper cover and the lower base on the

upper and lower parts of the container body, mounting the vertical support bars and the horizontal support bands on the outer circumference of the container body between the upper cover and the lower base, and making most of components except
5 for the vertical support bars of the synthetic resin material.

Further, when each of the intermediate bulk containers is stacked in the vertical direction, the upper covers and the lower bases, corresponding to each other, are fitted with each other such that the vertically stacked intermediate bulk
10 containers can be respectively maintained in a stably stacked state.

Furthermore, the vertical support bars and the horizontal support bands are respectively fitted in the horizontal and vertical mounting grooves, which are formed on the outer
15 circumferential surface of the container body, so as to stably support the container body, thereby preventing the expansion of the container body, which is made of a synthetic resin material, as well as preventing the increase of the whole volume of the intermediate bulk container.

20 In addition, the plurality of bottom support bars for supporting the lower part of the container body are mounted on the upper part of the lower base in the horizontal direction so

as to sufficiently support the container body, in which heavy content is received, thereby maintaining the intermediate bulk container stably.

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BRIEF DESCRIPTION OF THE INVENTION

The above and other objectives, features and advantages of the present invention will be apparent from the following detailed description of the preferred embodiments of the invention in conjunction with the accompanying drawings, in
10 which:

Fig. 1 is a perspective view showing a prior art device,

Fig. 2 is a front view showing the prior art device,

Fig. 3 is a perspective view showing an intermediate bulk container according to the present invention,

15 Fig. 4 is an exploded perspective view showing the intermediate bulk container according to the present invention,

Fig. 5 is a longitudinal sectional view showing the intermediate bulk container according to the present invention,

Fig. 6 is a perspective view showing the bottom surface of
20 a lower base plate employed in the present invention, and

Fig. 7 is a cross sectional view showing part "A" in Fig. 3.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Reference will be now made in detail to the preferred
5 embodiments of the present invention with reference to the
attached drawings. It should be understood that the scope of the
present invention is not limited by the example embodiment of
the present invention which will be described in the following
and the whole configuration described in the present embodiment
10 cannot be considered to be essential as the means to solve
problems in the present invention.

An intermediate bulk container according to the present
invention will now be described in detail with reference to Fig.
3 to Fig. 7.

15 Referring to Fig. 3 to Fig. 5, an intermediate bulk
container 100 according to the present invention, includes a
container body 110 having an injection hole 116 formed in the
upper part thereof and a discharge hole (not shown) formed in
the front side of the lower part thereof and mounted with a
20 discharge hole 119, an upper cover 130 and a lower base 120
respectively coupled to the upper and lower parts of the
container body, a plurality of vertical support bars 140 mounted

at intervals on the outside of the container body 110 in the vertical direction between the upper cover 130 and the lower base 120, and a plurality of horizontal support bands 150 mounted on the outer circumferential surface of the container
5 body 110, including the vertical support bars 140 mounted on the outer circumferential surface of the container body 110 in the vertical direction, so as to encompass the outer circumferential surface of the container body 110 in the horizontal direction.

The container body 110, the upper cover 130 and the lower
10 base 120 are made of a synthetic resin material, and the vertical support bars 140 are made of a metal pipe into a semi-circular shape.

The horizontal support bands 150 are embodied by a strong band, which is formed by weaving strong synthetic fiber, or a
15 band made of a synthetic resin material, which has high tensile strength, or as an example by a steel band.

The container body 110 has an injection hole 116 formed at the upper part thereof so as to inject liquid content into the inside thereof, wherein the injection hole 116 is formed with a
20 screw part such that a cap 118 is screw-coupled to the injection hole 116 so as to be opened or closed. The container body 110 has a discharge hole formed in the lower side of the front part

thereof so as to discharge the content received therein. The front wall of the container body 110, in which the discharge hole is formed, is formed to be dented such that the dented part is to be a valve mounting groove 113.

5 Referring to Fig. 3, the container body 110 may have a cross section in the shape of a circle. As the cross section of the container body 110 is circle, the upper cover 130 and the lower base 120 may also have cross sections in the shape of a circle.

10 A discharge valve 119 is provided to the discharge hole formed in the inner wall of the valve mounting groove 113. Herein, the size of the valve mounting groove 113 is formed in such a manner that the outside end of the discharge valve 119 is prevented from being exposed to the outside of the container
15 body 110, that is, the discharge valve 119 is inserted into the space of the valve mounting groove 113. By doing this, when storing a plurality of intermediate bulk containers 100, an area required for the storage can be prevented from being increased.

Conventionally, the container body 110 is formed and then
20 the discharge valve 119 is coupled to the container body by thermal bonding. However, according to the present invention, the discharge valve 119 is formed in advance and the inserted

into a container body 110 mold such that the container body 110 is integrally formed with the discharge valve 119 during the molding thereof.

In addition, upper and lower fitting parts 114, 115 are
5 formed at the upper and lower parts of the container body 110, wherein the upper and lower fitting parts 114, 115 have a diameter which decreases by the thickness of the outer wall parts of the upper cover 130 and the lower base 120. The container body 110 has vertical mounting grooves 111 and
10 horizontal mounting grooves 112, which are formed to be spaced from each other at predetermined intervals on the outer circumference of the container body 110 so as to be respectively inserted by the vertical support bars 140 and the horizontal support bands 150. The container body 110 has plurality of
15 inward ribs 117 formed on the top surface thereof.

The upper cover 130 is mounted in the shape of a cap on the upper fitting part 114 at the upper part of the container body 110. The upper cover 130 is vertically penetrated with a through hole 131 at a position corresponding to the cap 118, and has
20 fitting protrusions 132 formed to be protruded at both sides on the top surface thereof and a plurality of support bar coupling parts 133 formed at intervals on the entire outer circumference

so as to be inserted by the upper end parts of the vertical support bars 140.

Further, the lower base 120 is fitted to be provided to the lower part of the container body 110. The lower base 120 has
5 forklift fork insertion grooves 124 formed at both sides of the lower part thereof so as to be inserted by a forklift fork and a plurality of support bar coupling parts 122 formed on the entire outer circumference at positions corresponding to the support bar coupling parts 133 of the upper cover 130 so as to be
10 inserted by the lower end parts of the vertical support bars 140. The lower base 120 has fitting grooves 125 to be fitted with the fitting protrusions 132 of another intermediate bulk container 100, which is stacked at the lower side thereof, when the intermediate bulk container 100 is stacked with other
15 intermediate bulk containers 100.

As shown in Fig. 4 and Fig. 5, a plurality of support bars insertion grooves 127 are formed in the horizontal direction at intervals on the upper part of the lower base 120, and each of the plurality of support bars insertion grooves 127 are provided
20 with bottom support bars 126 for supporting the lower part of the container body 110. Herein, it is preferable to use an "H"-beam, a rectangular pipe, "C"-beam and the like, which are made of a metal material.

The vertical support bars 140 are provided and coupled by screws respectively at the support bar coupling parts 133 of the upper cover 130 and the support bar coupling parts 122 of the lower base 120 in a state, where the upper and lower end parts thereof are respectively fitted into the support bar coupling parts 133 of the upper cover 130 and the support bar coupling parts 122 of the lower base 120. Even though the vertical support bars 140 formed in the shape of a semi-circular pipe are explained hereinabove, the vertical support bars 140 can be also formed in the shape of a rectangular pipe, a circular pipe or an oval pipe.

Further, the horizontal support bands 150 are mounted at intervals on the outer circumferential surface of the container body 110 in the horizontal direction so as to encompass the entire outer circumferential surface of the container body 110, including the outer circumferential surfaces of the vertical support bars 140. The vertical support bars 140 and the horizontal support bands 150 described hereinabove prevent the container body 110, which is made of a synthetic resin material, from being expanded in the shape of a pot, thereby preventing the swelling shape.

In the drawings, reference sign "121" which is not explained denotes the outer wall part vertically formed on the

entire periphery of the lower base 120, and reference sign "123" denotes a valve receiving part formed on the lower base 120.

Hereinafter, the operational relations of the present invention structured as above will be now described in detail with reference to Fig. 3 to Fig. 7. The intermediate bulk container 100 according to the present invention approximately includes the container body 110 for mainly receiving liquid content, the upper cover 130 fitted with the upper part of the container body 110, the lower base 120 fitted with the lower part of the container body 110, and vertical support bars 140 and the horizontal support bands 150 provided between the upper cover 130 and the lower base 120.

The upper and lower fitting parts 114, 115 are formed at the upper and lower parts of the container body 110 and have a diameter, which decreases by the thickness of the outer wall parts of the upper cover 130 and the lower base 120. Therefore, when the upper cover 130 and the lower base 120 are respectively fitted with the upper and lower parts of the container body 110, the upper cover 130 and the lower base 120 are smoothly assembled into the container body 110 such that the outer wall surfaces of the upper cover 130 and the lower base 120 and the outer wall surface of the container body 110 are arranged at the same height, as shown in "B" of Fig. 5. As the discharge valve

119 is mounted on the inside of the valve mounting groove 113 or the discharge valve 119 is mounted to be prevented to be exposed to the outside of the container body, it is possible to ship the plurality of intermediate bulk containers 100 much more per unit
5 area.

As for the method for coupling the vertical support bars 140, as shown in Figs. 3, 4 and 7, the vertical support bars 140 are inserted into the support bar coupling parts 133, 122, which are respectively formed on the upper cover 130 and the lower
10 base 120, and the coupled thereto by screws from the outsides of the support bar coupling parts 133, 122.

Herein, the vertical support bars 140 are to be inserted into the vertical mounting grooves 111, which are formed in the longitudinal direction of the container body 110 at certain
15 intervals in the circumferential direction of the container body.

After fitting the upper cover 130 and the lower base 120 with the upper and lower parts of the container body 110 and mounting the plurality of vertical support bars 140 as described above, the horizontal support bands 150 are mounted so as to
20 encompass the outer circumferences of the respective vertical support bars 140 and the container body 110, wherein the horizontal support bands 150 are inserted into the plurality of

horizontal mounting grooves 112, which are formed in the circumferential direction of the container body 110 at certain intervals in the longitudinal direction of the container body 110. Therefore, the horizontal support bands 150 is mounted
5 intersecting the vertical support bars 140.

As the upper cover 130 and the lower base 120 are mounted on the upper and lower parts of the container body 110 as described above and the vertical support bars 140 and the horizontal support bands 150 are respectively mounted on the
10 outside of the container body 110 between the upper cover 130 and the lower base 120, the container body 110 can accommodate approximately one tone of content therein. Conventionally, if the intermediate bulk containers are stacked in the vertical direction, the container bodies of the stacked intermediate bulk
15 containers are likely to be expanded outwards in the shape of a pot and thus changed into a swelling shape. However, according to the present invention, the vertical support bars 140 support loads applied to the intermediate bulk container 110 in the vertical direction and the horizontal support bands 150 restrain
20 the force to be expanded in the circumferential direction, thereby preventing the swelling phenomenon.

As the vertical support bars 140 are mounted on the vertical mounting grooves 111 and the horizontal support bands

150 are mounted on the horizontal mounting grooves 112, the vertical support bars 140 and the horizontal support bands 150 do not escape from the positions thereof so as to stably support the container body 110 and stably fasten the container body 110
5 all the time.

In addition, the container body 110 is formed with the vertical mounting grooves 111 and the horizontal mounting grooves 112, the top surface of the container body 110 is formed with the plurality of inward ribs 117, and the upper and lower
10 parts of the container body 110 are formed with the upper and lower fitting parts 114, 115 respectively. Therefore, the overall strength of the container body 110, which is made of a synthetic resin material, is maximized.

Further, when stacking the intermediate bulk containers 100
15 according to the present invention in the vertical direction, as shown in Figs. 4, 6 and 7, the fitting protrusions 132 are protruded upwards on the upper covers 130, the fitting grooves 125 are formed on the lower bases 120, such that the fitting protrusions 132 of the intermediate bulk container 100
20 positioned at a lower side are fitted with the fitting grooves 125 of the intermediate bulk container 100 stacked at an upper side. Therefore, each of the intermediate bulk containers 100

are maintained in a stable state without any slippage or deviation.

Furthermore, the intermediate bulk container 100 according to the present invention has the forklift fork insertion grooves
5 124 formed at both sides of the lower part of the lower base 120 such that the intermediate bulk container 100, which is heavy as much as approximately one ton, can be readily transferred.

In addition, as shown in Fig. 4 and Fig. 5, the plurality of support bars insertion grooves 127 are formed in the
10 horizontal direction on the upper part of the lower base 120 and the bottom support bars 126 for supporting the lower part of the container body 110 are respectively mounted on the support bars insertion grooves 127 such that the lower base 120 can sufficiently support the container body 110 which receives heavy
15 content therein. Therefore, the stable intermediate bulk container 100 as above can be provided.

What is claimed is:

1. An intermediate bulk container, comprising:

a plurality of vertical mounting grooves, which are placed at certain intervals in a circumferential direction of the container, and which are formed in a longitudinal direction of the container;

a plurality of vertical support bars mounted on the vertical mounting grooves;

a plurality of horizontal mounting grooves, which are placed at certain intervals in the longitudinal direction of the container, and which are formed in the circumferential direction of the container; and

a plurality of horizontal support bands mounted on the horizontal mounting grooves,

wherein the vertical support bars and the horizontal support bands are installed so as to cross each other.

2. The intermediate bulk container according to claim 1, wherein the vertical support bars support a load applied in the vertical direction of the container and the horizontal support bands support force to be expanded in the circumferential direction of the container.

3. The intermediate bulk container according to claim 1,
further comprising:

an upper cover fitted into the upper part of the container,
and having a plurality of support bar coupling parts, to which
5 the upper end parts of the vertical support bars are inserted
and coupled, formed at intervals in the circumferential
direction; and

a lower base fitted into the lower part of the container,
and having a plurality of support bar coupling parts, to which
10 the lower end parts of the vertical support bars are inserted
and coupled, formed at intervals in the circumferential
direction at positions corresponding to the support bar coupling
parts of the upper cover.

4. The intermediate bulk container according to claim 1,
15 wherein fitting protrusions are formed to be protruded at both
sides of the upper cover, and fitting grooves are formed at both
sides of the lower base at positions corresponding to the
forming positions of the fitting protrusions.

5. The intermediate bulk container according to claim 4,
20 wherein, when stacking intermediate bulk containers, the
intermediate bulk containers are stacked in such a manner that
the fitting protrusions of an intermediate bulk container at a

lower side are fitted into the fitting grooves of an intermediate bulk container at an upper side.

6. The intermediate bulk container according to claim 3, wherein the container, the upper cover and the lower base are
5 made of a synthetic resin material, and the vertical support bars are made of a metal material.

7. The intermediate bulk container according to claim 6, wherein the vertical support bars are made of a metal pipe into the shape of a semi-circular pipe, a rectangular pipe, a
10 circular pipe or an oval pipe.

8. The intermediate bulk container according to claim 6, wherein the horizontal support bands are made by weaving synthetic fiber, or of a synthetic resin material or a metal material.

15 9. The intermediate bulk container according to claim 31, wherein upper and lower fitting parts are formed at the upper part and the lower part of the container and have a diameter, which reduces by the thickness of the outer wall parts of the upper cover and the lower base.

20 10. The intermediate bulk container according to claim 1, wherein a valve mounting groove is formed at the lower end of the container, a discharge valve is coupled to the inner wall of

the valve mounting groove, and the coupling of the discharge valve and the container is carried out in such a manner that, after the discharge valve, which is made in advance, is inserted into a container mold, the discharge valve is integrally coupled
5 to the container during the molding of the container.

11. An intermediate bulk container, comprising:

a container body having a cap provided to an injection hole, which is formed in the upper part of the container body, so as to open or close the injection hole, a discharge hole formed in
10 the inner wall of a valve mounting groove, which is formed to be dented at the lower side of the front part of the container, and a discharge valve provided to the discharge hole;

an upper cover provided in the shape of a cap to the upper part of the container body, and having a through hole formed at
15 a position corresponding to the cap, fitting protrusions formed to be protruded at both sides of a top surface, and a plurality of support bar coupling parts formed at intervals on the entire outer circumference so as to be inserted by the upper end parts of vertical support bars;

20 a lower base fitted to be provided to the lower part of the container body, and having forklift fork insertion grooves formed at both sides of the lower part so as to be inserted by a

forklift fork, a plurality of support bar coupling parts formed on the entire outer circumference at positions corresponding to the support bar coupling parts of the upper cover so as to be inserted by the lower end parts of the vertical support bars, and fitting grooves formed to be fitted with fitting protrusions of an intermediate bulk container to be stacked at a lower side when stacking intermediate bulk containers;

the vertical support bars provided and coupled by screws in a state, where upper and lower end parts are respectively fitted into the support bar coupling parts of the upper cover and the support bar coupling parts of the lower base, which are inserted into the upper and lower parts of the container body, so as to be coupled by screws; and

a plurality of horizontal support bands provided so as to tighten the entire outer circumferential surface of the container body, including the outer circumferential surfaces of the vertical support bars provided at intervals in the vertical direction on the outer circumferential surface of the container body.

12. The intermediate bulk container according to claim 1, wherein upper and lower fitting parts are formed at the upper part and the lower part of the container body and have a

diameter, which reduces by the thickness of the outer wall parts of the upper cover and the lower base, vertical mounting grooves and horizontal mounting grooves are formed on the outer circumference of the container body so as to be inserted by the
5 vertical support bars and the horizontal support bands, and a plurality of inward ribs are formed on the top surface of the container body.

13. The intermediate bulk container according to claim 1, wherein a plurality of support bar insertion grooves are formed
10 at the upper part of the lower base in the horizontal direction, and bottom support bars are provided to each of the support bar insertion grooves so as to support the lower part of the container body.