CLAIMS

1.A connection system including a first and a second container, said connection system comprising:

a closing sleeve, provided with a first part permanently mounted on the first container to protect a sterile interior of the closing sleeve, and said closing sleeve also being provided with a second part which is suitable for allowing the temporary mounting of the opening of the second container;

a membrane separating said first and said second part of said closing sleeve, said membrane being suitable for being perforated by the second container during the mounting of the latter on the second part of the closing sleeve;

a lid intended for closing off the second part of the closing sleeve before the connection system is used, said lid and said closing sleeve being obtained by means of a simultaneous method of moulding by injection of at least one plastic material, the lid being mounted on the second part of the closing sleeve once the lid and the closing sleeve have exited their respective moulds; and

wherein the second container comprises a dispenser to be introduced in said second part of said closing sleeve to perforate said membrane and continue to advance until said dispenser is received inside an opening of a joining element inserted between the first container and said first part of said closing sleeve and wherein a second membrane is integrated between the closing sleeve and joining element.

2.The system for connecting containers which is intended for the temporary assembly of said containers according to Claim 1, the lid being mounted on the second part of the closing sleeve before the lid and the closing sleeve are cooled to ambient temperature.

3.The system for connecting containers which is intended for the temporary assembly of said containers according to Claim 1, wherein the membrane is an integral element of the closing sleeve and comprises a plastic material that is same as a material used for the first part and the second part of the closing sleeve.

4.The system for connecting containers which is intended for the temporary assembly of said containers according to Claim 1, wherein the lid is provided with a frangible zone in the form of a tearable tab, suitable for being pulled off and thus facilitating the removal of said lid from the second part of the closing sleeve.

5.The system for connecting containers which is intended for the temporary assembly of said containers according to Claim 1, wherein the lid is provided with a tamper-proof ring suitable for being separated from the body of said lid during the initial opening of said lid.

6. The system of Claim 1, wherein the second membrane includes aluminum material and is pre-mounted on a surface of the joining element interfacing with the second part of the closing sleeve.

7. The system of Claim 1, wherein the flask packages a substance including at least one of: a powder, a lyophilizate, or a liquid.

8. A method for obtaining a connection system including a first and a second container, said connection system comprising a closing sleeve provided with a lower part permanently mounted on the first container to protect sterile interior of the closing sleeve, provided with an upper part which is suitable for allowing the mounting of the opening of the second container and provided with an integrated membrane, said membrane separating the upper part from the lower part of the closing sleeve, said membrane being suitable for being perforated by the second container when the latter is mounted on the upper part of the closing sleeve, characterised in that said method comprises the following steps:

- forming the closing sleeve and the lid by using a simultaneous method of moulding by injection of at least one plastic material,
- assembling the lid and the closing sleeve upon extraction of the lid and the closing sleeve from their respective moulds,
- forming a dispenser of the second container to be introduced in said second part of said closing sleeve to perforate said member and continue to advance until said dispenser is received inside an opening of a joining element inserted between the first container and said first part of said closing sleeve, wherein a second membrane is integrated between the closing sleeve and the joining element, and
- mounting the lid on the second part of the connection device in order to thus close off said second part of the closing sleeve, once the lid and the closing sleeve have exited their respective moulds.

9. The method for obtaining a system for connecting containers which is intended for temporary assembly of a first and a second container according to Claim 8, wherein the lid is mounted on the second part of the closing sleeve before said lid and the closing sleeve are cooled to ambient temperature.

10. The method of Claim 8, comprising:

performing pre-sterilization of the interior of the closing device using at least one of: gamma rays or ethylene oxide.

11. The method of Claim 8, comprising:

filing the flask with a sterile solution comprising at least one active ingredient; and subjecting the flask to freeze-drying conditions.