# DESCRIPTION

TITLE OF INVENTION: ALKYLAMINE COMPOSITION AND METHOD FOR STORING SAID ALKYLAMINE COMPOSITION

## TECHNICAL FIELD

[0001]

The present disclosure relates to an alkylamine composition and a method for storing the alkylamine composition.

## BACKGROUND ART

[0002]

Alkylamines, including n-butylamine, are used in the production process of pharmaceutical products and the production process of semiconductors. The purity of raw materials used in such production processes of pharmaceutical products and semiconductors is preferably as high as possible.

[0003]

Alkylamines however often suffer discoloration or a decline in purity during storage. As a method for preventing such discoloration during storage, Patent Literature 1 discloses a method including adding hydrazine to an aromatic amine for stabilization, thereby preventing discoloration.

## CITATION LIST

- Patent Literature

[0004]

Patent Literature 1: JP H03-287566 A

## SUMMARY OF DISCLOSURE

- Technical Problem

[0005]

The method disclosed in Patent Literature 1 includes addition of an additive containing hydrazine to a compound to be stored. In such a case, the amine composition contains the additive itself or a substance derived from the additive. Use of the amine composition in the production process of pharmaceutical products and the like may possibly cause production of a product that does not meet the required properties.

[0006]

In view of the above issue, the present disclosure aims to provide an alkylamine composition that contains a small amount of an ingredient which is unlikely to have an adverse effect in the production process of pharmaceutical products and the like, that has excellent storage stability, and that is unlikely to suffer an increase in impurities even after long-term storage. The present disclosure also aims to provide a method for stably storing the alkylamine composition.

- Solution to Problem

[0007]

The present inventors made intensive studies to find that the formation of imines during long-term storage of alkylamines causes a decline in purity, and that in alkylamine compositions containing a small amount of water, a decline in purity due to the formation of imines during long-term storage can be reduced and the total amount of impurities, including water, can also be reduced. Thus, the present disclosure was completed.

[0008]

In one aspect, there is provided an alkylamine composition comprising: an alkylamine represented by the following formula (1) in an amount of 99.5% by volume or more; and water in an amount of 10 ppm by mass or more and

100 ppm by mass or less:

and 1000 ppm by volume or less, which inhibits the formation of an imine for a long period of time.

[0013]

In the alkylamine composition of the present disclosure, setting the oxygen content to less than 1 ppm by volume is difficult. In contrast, setting the oxygen content to higher than 1000 ppm by volume may increase the imine content even when the water content is within the above range. Use of such an alkylamine composition as a raw material in the production of pharmaceutical products and the like may allow the imine itself to possibly affect the properties of the product.

[0014]

The alkylamine composition of the present disclosure preferably contains the alkylamine in an amount of 99.9% by volume or more.

The alkylamine composition of the present disclosure containing the alkylamine in an amount of 99.9% by volume or more has a high alkylamine purity and can keep an impurity content small over a long period of time. Such a composition can be more suitable for use in pharmaceutical products and the like.

[0015]

In another aspect, there is provided a method for storing an alkylamine composition, comprising: filling a container with the alkylamine composition as defined above; and storing the container filled with the alkylamine composition at 10°C or higher and 45°C or lower.

[0016]

The method for storing an alkylamine composition of the present disclosure includes: filling a container with an alkylamine composition; and storing the container filled with the alkylamine composition at 10°C or higher and 45°C or lower. In the method, the alkylamine composition used

is the alkylamine composition of the present disclosure and