

IS 799 : 2023 AMMONIA LIQUOR SPECIFICATION

Liquor ammonia, an inorganic chemical, also known as aqueous ammonia or ammonium hydroxide, is a saturated solution of ammonia gas in water (NH_4OH). It's a clear, colorless liquid with a strong, pungent odor

Ammoniacal Liquor, is used as a liquid chemical in various industries like Rubber, Pharmaceuticals, etc. It is used in the waste and wastewater treatment, cold storage, rubber, pulp and paper, and food and beverage industries as a stabilizer, neutralizer and a source of nitrogen. Liquor ammonia is used in:

- a) **Cleaning**
- b) **Deodorizing**
- c) **Stain removal**
- d) **Agriculture (Fertilizers)**
- e) **Manufacturing** (In the production of textiles, plastics, pesticides, and chemicals)

Exposure to high levels of ammonia can cause death from a swollen throat or from chemical burns to the lungs. When working with liquor ammonia, it's important to wear the appropriate personal protective equipment (PPE).

IS 799 : 2023 prescribes the requirements and methods of sampling and test for ammonia, liquor

Two grades are specified in the IS, namely:

- a. Technical grade intended for uses, such as cleansing agent, refrigerant, accelerator in vulcanization, and in the ammonia process of ferro printing of drawings; and
- b. Analytical reagent grade.

The important tests specified in the IS are:

- a. Ammonia,
- b. Impurities (chloride, silicate, carbonate, etc.)

Standard also specifies that the packaging storage conditions and labelling requirements. The product is to be kept in a cool place and provided with a label containing the warning:

LIQUID CAUSES BURNS — VAPOUR EXTREMELY IRRITATING: HANDLE WITH CARE

The standardization and certification of the product are crucial for maintaining safety, ensuring quality, and protecting the environment. Compliance to the standard may help manufacturers ensure that ammonia liquor is both safe and effective in its various industrial and commercial applications.