
AMMONIUM HYDROXIDE IN HAIR PRODUCTS

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WHAT IS AMMONIA?

Ammonia is a colorless gas that is referred to as ammonium hydroxide in aqueous solution. Ammonium hydroxide has the characteristic and unpleasant odor of ammonia in gaseous form.

Ammonium hydroxide has a very wide variety of uses, as a fertilizer supplying nitrogen to agricultural land and as a cleaning agent in household products. Ammonium hydroxide is also used in certain hair products (perms, hair colors, hair straighteners) for its alkaline and reducing properties.

In hair coloration, oxidation and decoloration products, ammonium hydroxide facilitates colorant penetration into the hair but is also necessary for the effectiveness of hydrogen peroxide, which is only active in an alkaline medium. In hair relaxing and straightening products, ammonium hydroxide acts on the structure of the hair to induce the required shape of the hair.

ARE THERE ANY RISKS?

Commercially available concentrated ammonium hydroxide solutions are very hazardous and may induce burns. The solutions are to be handled using appropriate individual protective measures (gloves, protection of the face and eyes). At high doses, ammonia fumes may give rise to discomfort or even irritation of the skin and respiratory tract.

These harmful properties of ammonium hydroxide have led legislators to regulate its use in cosmetic products. In Europe, the maximum concentration authorized in a cosmetic product is 6% and labeling is mandatory above 2%. Under those conditions, use of ammonium hydroxide in cosmetic products is not associated with any risk for consumers.

WHY ARE L'OREAL PRODUCTS CONTAINING AMMONIUM HYDROXIDE SAFE?

We never compromise on the quality and safety of our products for consumers and hairdressers. All our raw materials and products undergo very rigorous safety assessment before marketing. In order to ensure perfect safety under normal conditions of use, we display particular precautions for use on the packaging of certain cosmetic products (glove wearing, measures to be taken in the event of accidental contact with the eyes). These particular precautions may be required by the regulations or by our safety assessors.

We regularly conduct studies targeting hairdressing professionals in order to verify the correct use of our hair products (compliance with the precautions for use, glove wearing, salon ventilation, etc.). Compliance with the precautionary measures ensures perfectly safe use of our products containing ammonium hydroxide for both consumers and hairdressers.

L'ORÉAL