



Hydrogen peroxide and peracetic acid

What is hydrogen peroxide?

Hydrogen peroxide is a colorless liquid substance having powerful oxidizing properties. Its uses are many: it is an antiseptic for topical treatment, a component of hair products, a water treatment agent, etc. Hydrogen peroxide can be used as a disinfectant or a bleach in the pharmaceutical industry, food industry ... This is a bactericidal, fungicidal, sporicidal and virucidal substance.

IBL Specifik's product APABIO is composed of hydrogen peroxide, which makes it powerful enough to disinfect surfaces in an aerial way (airborne disinfection).

What is peracetic acid?

It can be obtained by mixing acetic acid with hydrogen peroxide using the following formula:

* Acetic acid + Hydrogen peroxide \rightleftharpoons peracetic acid + water

* $\text{CH}_3\text{-(COOH)} + \text{H}_2\text{O}_2 \rightleftharpoons \text{CH}_3\text{-(COOOH)} + \text{H}_2\text{O}$

Peracetic acid (also known as PAA) is a colorless liquid which is used in food, textiles and medical industries as a disinfectant.

Peracetic acid has a strong oxidant power. It acts by:

- * Protein denaturation
- * Modification of the permeability of cell membranes and
- * Oxidation of sulfide bridges, sulfhydryl proteins, enzymes and other cellular metabolites.

It acts on the microorganisms as a bactericidal, fungicidal, sporicidal and virucidal. Peracetic acid has a broad antimicrobial spectrum covering all microbial groups with a short duration of action, even at low concentrations.



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The APABIO disinfectant

Hydrogen peroxide has a synergistic effect on peracetic acid. The disinfectant APABIO combines the two substances so its effectiveness is increased.

In addition, concentrations of hydrogen peroxide and peracetic acid in the product APABIO are low, 5% and 0.01% respectively.

These low concentrations make the disinfectant APABIO harmless and non toxic to human and its environment.

Sources :

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