

UJI STERILITAS KASA STERIL DARI BERBAGAI JENIS PENGEMAS YANG TELAH DIBUKA KEMASAN SEKUNDERNYA DAN DISIMPAN SELAMA TIGA HARI

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Abstract

Sterile gauze is a health tool that is widely used in society. Sterile gauze used to cover wounds to prevent contamination. A box of sterile gauze that contains several sheets usually isn't necessary used up for one day. Therefore, sterility test has been done in this research. There were two types of sterile gauze, which were tested during the experiment. The types of primary packaging are made of parchment paper and plastic material.

The research carried out for sterility test in different conditions i.e. the initial conditions and for three days storage after the secondary packaging was opened. Sterility testing using the medium tioglikolat and kasamino, which was sterilized by autoclave at 121 °C for 15 minutes. As a positive control used *Bacillus subtilis* bacteria grown on medium tioglikolat, and the fungus *Candida albicans* grown in medium kasamino.

The result of the research showed that sterile gauze using parchment paper as a primary packaging proved sterile, while the use of plastic primary packaging depending on the level of transparency. For the type of opaque white plastic packaging proved to be sterile, while for the type of primary colors translucent or transparent packaging weren't proven to be sterile or have shown the growth of microorganisms. Unsterile gauze was count the number of colonies with ALT method and the results as much as $1,6 \cdot 10^7$ CFU / ml.

Keywords : sterile gauze, parchment paper and plastic material, sterility test, secondary packaging