



P16. COMMON PROBLEMS ENCOUNTERED IN THE MICROBIOLOGICAL ANALYSIS OF BIOCIDAL PRODUCTS

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As many parameters that affect the success of a biocidal product, under laboratory conditions there are also factors affecting the reliability and accuracy of tests to determine the microbiological efficacy of these products. The assessment of the microbiological efficacy of the biocidal products and in order to ensure standardization between laboratories it is essential the use of internationally accepted methods.

To select accurate method regarding use of the product to be tested, to use the reference microorganisms, carefully preparing cell suspension, to ensure compliance with the contact time specified in the standard, at the end of the contact time to neutralize depending on the nature of the active ingredient with suitable neutralizing agent at the end of the contact time are important considerations that will affect the result of analysis.

Factors affecting the results of microbiological efficacy tests may be due to microorganisms, environmental factors and disinfectants. To dominate the microbiology to know the structural characteristics of microorganisms of the staff involved in the study is important for the evaluation of the results. Biocidal products related factors are the concentration and contact time of the product. The maximum ambient temperature, pH, hardness of the water in which the diluted disinfectant and organic matter load in the environment are the environmental factors affecting disinfection. For example; while glutaraldehyde is more effective in high pH, sodium hypochlorite may be more effective in the low pH, comparatively. Organic pollution, as it provides nutrients to microorganisms is an important factor that reduces the disinfectant activity. When measuring disinfectant efficacy of the use of polluting agents, it will allow the determination of actual activity in area of use of the product.

Standards for microbiological efficacy test methods currently used are inadequate in some cases. In particular, it has become necessary to develop different methods for microbiological efficacy test methods of the drinking water disinfectants, air disinfectants in aerosol form and disinfectants used against biofilms.

Although the possibility of obtaining different results even though the field applications in practice, made adherence to standard methods and taking into account the microbiological efficiency tests of biocidal products will ensure that the receiving reliable results. The results to be obtained, it should be noted that exactly the hygiene and affect human health.