Animal and poultry health is very important factor that influences the indices of profitability of animal husbandry. The losses as the result of infectious diseases are significantly higher, than the expenses on prophylactic measures and compliance with sanitary hygienic housing conditions. Therefore, water disinfection and its protection from bacterial pollution remains topical problem that is why effective disinfectants with high bactericidal, virucidal and fungicidal effect are very important for practical veterinary medicine.

The approach in the sphere of water disinfection is application of polymeric biocidal medicinal products of natural and synthetic origin. That is why, the products of new generation are used containing polymeric derivatives of guanidine, namely polyhexamethylene guanidine. The trials determined that medicinal products containing polyhexamethylene guanidine meet the requirements of activity of wide spectrum of microorganisms and slow formation of resistant forms. Such medicinal products possess ecological security, stability during storage and transportation, prolonged activity, good solubility in water, ability to be used without activation or mixing of several components and universality.

Nowadays small number of ecologically pure and safe disinfectants are developed in Ukraine that would meet all established criteria. That is why, there is a necessity to develop new disinfectants that will to perform effective and qualitative disinfection of water.

The article presents the results of bactericidal activity determination of disinfectant containing polyhexamethylene-guanidine salts. It was determined that bactericidal activity of tested product at exposure of 15 min in respect to L. monocytogenes was observed in concentration of 0.1 mg/sm³, E. coli and S. marcescens - 0.05 mg/sm³, P. aeruginosa - 0.025 mg/sm³, S. aureus - 0.0125 mg/sm³, B. cereus and B. pumilis - 0.0062 mg/sm³, E. aerogenes and B. subtilis - 0.0031 mg/sm³. At exposure of 30 min bactericidal activity in respect to S. enteritidis was equal to 0.1 mg/sm³.

**Keywords:** DISINFECTANT, BACTERIAL CONCENTRATION, MICROORGANISM STRAINS, EXPOSURE, MEDICAL PRODUCT, POLYHEXAMETHYLENEGUANIDINE.