

UNIVERSAL DISINFECTANTS

HIGH QUALITY • SAFETY • LOW DOSAGE

VIROSAN

**OPTIMAL PRICE
/ QUALITY RATIO**



100 ml contains:
QACs - 25 g
Glutaraldehyde - 11 g



VIROSAN MAX

**THE MOST POWERFUL
DISINFECTANT**



100 ml contains:
Glutaraldehyde - 25 g
QACs - 12.5 g



Proven
activity
against
ASF

VIROSAN F / F2

**A SMART CHOICE FOR
THE SUMMER SEASON**



100 ml contains:
Formaldehyde - 14.8 g / 18.5 g
Glutaraldehyde - 10 g / 5 g
QACs - 5 g / 5 g



FORMALDEHYDE FREE

DESTROY ALL

viruses



bacteria



fungi



spores

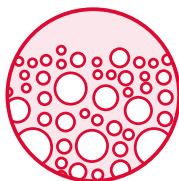


VERSATILITY OF USE

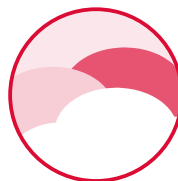
spray



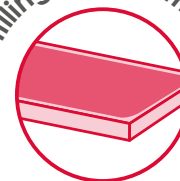
foaming



fogging



filling of disinfectant



self-degradable
action
7
days

LOW CONCENTRATION

100% VIRUCIDAL EFFECTIVENESS OF DISINFECTANT VIROSAN MAX AGAINST ASF VIRUS

The 100% disinfectant efficacy of VIROSAN MAX against African swine fever virus has been confirmed. VIROSAN MAX is recommended for use in ASF outbreak areas for the treatment of veterinary surveillance facilities and vehicles in order to completely inactivate the ASF virus and prevent its spread.

According to experts, the problem of ASF in the world is getting worse, and without the introduction of new, modern measures to combat and prevent this challenge may be impossible. Biosafety in ASF is the most important comprehensive prevention measure. And the main question - the right choice of disinfectant. In Ukraine, most disinfectants have not been studied for their virucidal effects on the ASF virus.

VIROSAN MAX, manufactured by BIOTESTLAB, became the first disinfectant to be tested for virucidal activity against ASF virus in conditions as close as possible to field conditions.

The efficacy of the disinfecting effect of VIROSAN MAX in the disinfection of ASF-contaminated surfaces that mimicked livestock facilities and vehicles was investigated, confirming the completeness of virus inactivation by performing a bioassay on susceptible animals (Table 1). In studies with the virus was used virulent epizootically significant ASF virus. 1.5 ml of virus-containing liquid (approx. 10 million virus particles per 1 ml) per 100 cm² was applied to sterile test objects that simulated livestock facilities (rough concrete surfaces). As a mechanical protection of the virus, sterile pig manure was used in the amount of 0.3 g of dry matter per 100 cm² of surface, which was 20% of organic matter in the liquid containing the virus.

Before applying to the surface, the suspension containing the virus was thoroughly mixed with an appropriate amount of manure. The mixture was evenly distributed on the surface of the test objects, after which they were dried for 1-2 hours. The studied 0.5-2.0% solutions of VIROSAN MAX were evenly applied by irrigation to the test objects at the rate of 0.3-0.5 L / m² of area. On the control test objects, instead of the solution of VIROSAN MAX, was applied the same amount of tap water that was used to prepare working solutions of disinfectant.

From treated with 0.5-2.0% solutions of disinfectant test objects were taken samples of material after 15-180 minutes. To do this, the material was scraped, treated with a special method for the extraction of ASF virus and immediately used to infect pigs. **A total of 19 animals were used for the bioassay:** 18 experimental and 1 control. Observations of infected piglets were **performed for 21 days**. The specificity of the disease and death of animals was confirmed by the method of detection of ASF virus in their blood.

Table 1. Determination in the bioassay of the disinfectant action of "VIROSAN MAX" during disinfection of test objects made of concrete contaminated with ASF virus

No	Drug concentration, %	The presence of protein protection	Consumption rate, L/m ²	Exposition, minutes	Test-surface Concrete Died/total
1	2,0	-	0,3	30	0/3
2	2,0	-	0,3	15	0/3
3	2,0	+	0,5	30	0/3
4	1,0	+	0,5	180	0/3
5	0,5	+	0,5	180	0/3
6	0,5	+	0,5	60	0/3
7	control				1/1

VIROSAN MAX
Dosing Guide



Thus, when irrigated with a solution of VIROSAN MAX test objects contaminated with ASF virus with protein protection in the form of pig manure, concrete surfaces were disinfected with 0.5% solution at an exposure of 60 min and above with a consumption rate of 0.5 L / m² and 2.0% solution at an exposure of 15 minutes and above with a consumption rate of 0.3 l / m² - **piglets of these experimental groups remained clinically healthy throughout the observation period. The control animal died on day 7 after infection with a characteristic clinical picture of ASF.**

The minimum effective bacteriostatic and bactericidal concentrations of VIROSAN MAX were also investigated using test microorganisms of 1, 2 resistance groups (Table 2).

Table 2. Antimicrobial activity of "VIROSAN MAX" against E.coli and S.aureus

Test microorganism	Type of activity	Antimicrobial activity, %	
		Without protein	With presence of protein
<i>E. coli</i> IO 2	b/s	0,0078	0,0625
	b/c	0,0156	0,125
<i>S. aureus</i> 209-P	b/s	0,0039	0,0312
	b/c	0,0156	0,0625

Note: b/s - bacteriostatic activity; b/c - bactericidal activity.

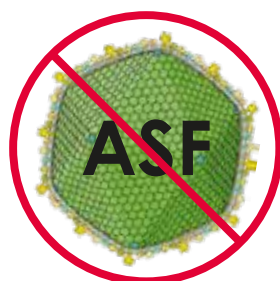
As a result of the conducted researches it is established that the disinfectant "VIROSAN MAX" has antimicrobial activity against test cultures of gram-negative (*E. coli*) and gram-positive (*S.aureus*) microorganisms in the following concentrations:

- MSC_{*E. coli*} - 0,0078 %;
- MBC_{*E. coli*} - 0,0156%;
- MSC_{*S. aureus*} - 0,0039%;
- MBC_{*S. aureus*} - 0,0156 %.

When adding high molecular weight protein, the bactericidal activity of the disinfectant is reduced by 4-8 times.

It was found that complete disinfection of rough concrete surfaces contaminated with ASF virulent virus (more than 10 million virus particles per 100 cm²) with protein protection in the form of pig manure (20% of organic matter in the liquid containing the virus) was achieved after a single irrigation with 0.5% solution of disinfectant VIROSAN MAX at an exposure of 60 minutes and above at a rate of 0.5 L / m² and 2.0% disinfectant solution at an exposure of 15 minutes and above at a consumption rate of 0.3 L / m². VIROSAN MAX disinfectant has a pronounced virucidal effect and is recommended for use in ASF outbreaks for the treatment of veterinary surveillance facilities and vehicles in accordance with the leaflet to completely inactivate the ASF virus and prevent its spread. VIROSAN MAX disinfectant has bactericidal and bacteriostatic activity against test cultures of gram-negative (*E. coli*) and gram-positive (*S. aureus*) microorganisms, ensuring their inactivation at a concentration of 0.0156%, without adding protein load. Thus, Virosan Max Ukrainian veterinary drug, the effect of which on the ASF virus has been proven by research in conditions as close as possible to field.

VIROSAN MAX
GUARANTEED TO DESTROY
THE ASF VIRUS



DISINFECTION IS AN IMPORTANT PART OF YOUR PREVENTION PLAN

5 things to know about VIROSAN disinfectant line

1. Total biocides (destroy all types of pathogens) with proven effectiveness.
2. Double effect on the pathogen: destroys the cell membrane and nucleus. No development of resistance.
3. Stability under hard water conditions, organic loading, UV rays and low/high temperatures. Does not cause corrosion.
4. Economical due to high concentration of active ingredients, low concentration of working solutions, and short exposure time.
5. Easy to use and versatile (spraying, foaming, fogging (cold/hot), filling the disinfection barrier).

Routes of administration and dosages

	VIROSAN	VIROSAN MAX	VIROSAN F / F2
Spraying ¹	0.1-0.5% / 4-12 m²	0.25-1.0% / 4-6 m²	0.25-1.0% / 1 m²
Foaming ¹	0.5% / 4-6 m²	0.25-0.5% / 4-6 m²	
Fogging ²	0.75 L	1.0 L	
Filling the disinfection barrier	0.5%	0.25-1.0%	

¹ Agent solution at the rate of 1 L of working solution/area depending on the type of disinfection (preventive or forced) and surface (smooth or rough). Forced disinfection in cases of outbreaks of particularly dangerous diseases — 1 L/m²

² Cold or hot fog: VIROSAN + 4 L water per 1000 m³ of space volume

³ The VIROSAN solution is renewed once a week or added to the disinfection barrier as it dries

Packaging

- 1-litre bottle
- 5-litre canister
- 10-litre canister
- 25-litre canister



Scan here

- VIROSANs Product Data Sheets



Produced by:



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