

What is Biosecurity?

“Biosecurity is a set of management practices which when followed correctly reduce the potential for the introduction and spread of disease causing organisms onto, and between farms.” It should be noted that biosecurity should be viewed from the perspective of the livestock rather than just the farm.

Why Biosecurity?

- To keep lethal, highly contagious diseases out of premises e.g. Newcastle disease (Fowl Pest), Avian Influenza, or acute Gumboro disease
- To reduce challenge by common pathogens known to reduce productivity such as E.coli and coccidiosis
- To reduce or eliminate, background immunosuppressive agents such as Marek's disease, chicken anaemia or Gumboro disease, which leave birds susceptible to other disease organisms
- To reduce contamination with agents of public health significance, such as salmonella or campylobacter
- Biosecurity is the least cost application for a beneficial animal production.

Biosecurity Checklist

1. Properly implemented biosecurity measures will limit the spread of disease- causing organisms.
2. When these are combined with disinfection and sanitation, vaccination and strategic treatments, many pathogens can be reduced to noninfectious levels.
3. Remember - different infectious agents spread by different methods, so use appropriate measures against each type.
4. Site location and design, and density of poultry in a given geographical area, are vital. When planning a new site, there is the opportunity for very effective biosecurity to be implemented at the design stage. However, biosecurity practices must concern themselves with practicalities, rather than a theoretical set-up.
5. All sites must have traffic - including personnel, feed, stock, and equipment - but this should be kept to an absolute minimum.
6. Only essential vehicles should have access to a site, and these should be sanitised where possible on arrival.
7. Use protective clothing to prevent pathogen spread.
8. Priority should be given to biosecurity measures on breeding sites since errors here are magnified greatly at the commercial level.
9. Similar priority should be given at the hatchery level.
10. Site decontamination, turnaround times and a well audited and structured cleansing and disinfection procedure should be in place for all sites.
11. Effective vermin control must be maintained.
12. Only disinfectants with proven broad spectrum efficacy against all viral and bacterial pathogens should be used and then at manufacturers' stated dilutions and directions.

Viru-Gard

***The Supreme Powder Disinfectant: Effective against all known classes of Virus and all types of Bacteria and Fungi
(UK DEFRA Approved)***

Viru-Gard is a powdered stabilized blend of peroxygen compounds, surfactant, organic acid and an inorganic buffer system for broad-spectrum pathogen control, effective against all classes of viruses, gram-positive and gram-negative bacteria and fungi. Viru-Gard is safe for the environment, degrading to harmless components at in-use dilutions.

Viru-Gard is cost effective with high dilution efficiency and effective in adverse conditions such as hard water, organic soiling and low temperature.



Instructions for Use

Viru-Gard can be used for terminal disinfection, fogging (in the presence or absence of livestock) and for water sanitation.

Terminal Surface and Equipment Disinfection

Use via a pressure washer with a fan nozzle set at 500-1000 psi at a dilution of 1:200, thoroughly wetting all surfaces. This will require 250-300 ml of solution per m² to achieve thorough wetting.

Fogging

Using a mechanical fogger apply a 1:200 dilution as a fine mist. This procedure can be safely carried out in the presence of livestock at times of disease challenge.

Water Sanitation

During terminal disinfection, drain header tank and clean, fill tank and dose with Viru-Gard to achieve a 1:200 dilution. Allow solution to stand in system for 1 hour, drain and flush with clean water.

With birds present, dose the header tank daily with a 1:1000 dilution.

Recommended Dilution Rates

Viru-Gard is active against a wide range of organisms and depending on requirements can be used at dilutions ranging from 1:100 to 1:1000. General purpose disinfection 1:200

Specific Activity Data:

Newcastle Disease	1:300	Foot and Mouth	1:1300
Avian Influenza	1:320	Swine Vesicular Disease	1:300
Gumboro Disease (IBD)	1:250	TGE	1:250
Chicken anaemia virus	1:250	Equine Herpes Virus	1:600
Marek's Disease	1:200	Equine arteritis virus	1:320
Avian leucosis virus	1:200	PRRS virus (Blue Ear)	1:700
Salmonella enteritidis	1:100	Aspergillus fumigatus	1:100

Precautions

1. Avoid contact with the concentrate.
2. Wear protective clothing and gloves. Wash immediately and thoroughly with water after accidental skin or eye contamination with powder.
3. Avoid inhalation of the powder.
4. Prevent contamination of food, food utensils, drinking water, rivers, dams etc.
5. Wash hands thoroughly after use.

Ultra-Gard

Multi-Purpose Disinfectant

Ultra-Gard is 100% active synergistic blend of organic acids, organic biocides and surfactants for broad-spectrum pathogen control. Ultra-Gard is active against a wide range of viruses, bacteria and fungi.

Ultra-Gard is cost effective and appropriate for use in adverse conditions such as hard water, organic soiling and low temperature.

Ultra-Gard is oil soluble giving it properties suitable for extended protection on difficult surfaces.



Instructions for Use

Disease Prevention

Immediate protection – Terminal disinfection before stocking. Use via a pressure washer with a fan nozzle set at 500-1000 psi at a dilution of 1:250, thoroughly wetting all surfaces. This will require 250-300 ml of solution per m². Allow to dry before re-stocking.

Wheel and Foot Dips – Use a dilution of 1:100. Clean and replenish dips weekly

Extended Protection

Terminal disinfection of difficult surfaces (Earth Floors or Porous surfaces). Thoroughly mix one part of Ultra-Gard with 5 parts of Diesel oil. Add to 94 parts of water, agitating well to form an emulsion. Use via a pressure washer with a fan nozzle set at 500-1000 psi, thoroughly wetting all surfaces. Allow to dry before re-stocking.

Recommended Dilution Rates

Poultry disease agents	1:250	Foot and Wheel Dips	1:100
Surface disinfection	1:250	Equipment disinfection	1:400
Vehicle disinfection	1:100		

For Particular Disease Instance

Newcastle Disease	1:250	Equine Viral Enteritis	1:900
Herpes Virus	1:200	Salmonella Enteritidis	1:200
Foot and Mouth Disease	1:500	Mycoplasma Gallisepticum	1:2000
Avian Influenza	1:200	Fowl Pox	1:2000

PRECAUTIONS

1. Avoid contact with concentrate and working solution.
2. Wear protective clothing, gloves and face mask. Wash immediately and thoroughly with water after accidental skin or eye contamination. Remove and wash contaminated clothing.
3. Prevent contamination of food, food utensils, drinking water, rivers, dams, etc.
4. Destroy empty containers by perforation and flattening and never re-use for any other purpose.
5. Wash hands thoroughly after use.

Farm-Gard

Concentrated virucidal disinfectant for the housing of all livestock

Farm-Gard is a 100% active synergistic blend of organic acids, surfactants and high and low molecular weight biocides for broad-spectrum pathogen control. Farm-Gard is active against a wide range of viruses, bacteria and fungi. Farm-Gard is cost effective and formulated to provide heavy-duty disinfection. It is particularly effective in the presence of organic challenge, hard water and at low temperatures.



Instructions for Use

Immediate protection – Terminal disinfection before stocking. Use via a pressure washer with a fan nozzle set at 500-1000 psi at a dilution of 1:200, thoroughly wetting all surfaces. This will require 250-300 ml of solution per m². Allow drying before re-stocking.

Wheel and Foot Dips. Use a dilution of 1:100. Clean and replenish dips weekly

Recommended Dilution Rates

Terminal Disinfection	1:200	Foot and Wheel Dips	1:100
Surface disinfection	1:200	Vehicle disinfection	1:100
Equipment disinfection	1:400	Poultry disease agents	1:200

For a Particular Disease Instance

Newcastle Disease	1:200	Tuberculosis	1:50
Swine Fever	1:1000	Herpes Virus	1:200
Foot and Mouth Disease	1:700	Salmonella Enteritidis	1:200
Avian Influenza	1:320	Mycoplasma	1:2000
Aspergillus Fumigatus	1:800	Rabies	1:200

Precautions

1. Avoid contact with concentrate and working solution.
2. Wear protective clothing, gloves and face mask. Wash immediately and thoroughly rinse with water after accidental skin or eye contamination. Remove and wash contaminated clothing.
3. Prevent contamination of food, food utensils, drinking water, rivers, dams, etc.
4. Destroy empty containers by perforation and flattening and never re-use for any other purpose.
5. Wash hands thoroughly after use.

Hatch-Gard

Hatchery Disinfectant

Hatch-Gard is a highly concentrated detergent disinfectant based on a synergistic blend of Quaternary Ammonium Compounds, Non-ionic Detergents, Foam Boosters and Sequestrants which provides a broad spectrum anti-bacterial and anti-fungal activity.

Hatch-Gard is ideal for use as a disinfectant for hatchery surfaces and equipment. At the dilution rates recommended it is safe in the environment in which man and animals have close contact.

Instructions for Use

Mix the required quantity of Hatch-Gard with water in a suitable container.

Stir thoroughly. Apply to cleaned surfaces with pressure washer (500 psi), Foam lance, Fogger, Squeegee, Mop, brush or cloth as appropriate.

Recommended Dilution Rates

Hatch-Gard can be used at a dilution of up to 1:400 for the disinfection of cleaned surfaces. For foaming applications where a thick tenacious foam is required, it is advisable to use the product at a dilution of 1:200.

Microbiological Efficacy

Hatch-Gard has been tested and found to be effective at a 1:400 dilution against the following microorganisms.

- Escherichia coli
- Pseudomonas aeruginosa.
- Staphylococcus aureus.
- Salmonella typhi.
- Aspergillus fumigatus.



Precautions

1. Avoid contact with concentrate.
2. Wear protective clothing, gloves and goggles when handling the concentrate. Wash immediately and thoroughly with water after accidental skin or eye contamination with concentrate.
3. Prevent contamination of food, food utensils, drinking water, rivers, dams etc.
4. Wash hands thoroughly after use.

Quat-Gard

Concentrated Detergent Sanitizer

Quat-Gard is a synergistic blend of quaternary ammonium compounds, surfactants and sequestrant. It is a concentrated, highly active broad-spectrum detergent sanitizer with the power to cope with heavy contamination. Quat-Gard can be used with all classes of livestock for cleaning and sanitizing buildings and equipment.

Quat-Gard is used as a pre-wash at a low dilution for the removal of heavy soiling, or can be used at a high dilution during wash down following foaming. Terminal disinfection should then be completed.



Instructions for Use

Quat-Gard can be applied manually or via a pressure washer or foaming lance as a pre-wash or for wash-down.

Pre-Wash

Pre-wash with Quat-Gard at a 1:250 dilution via a pressure washer or foam generator. With the pressure set at 500 – 1000 psi and a wide-angle nozzle or foam lance, spray the whole area to be treated.

Wash-Down

After foaming or pre-wash, use Quat-Gard at a 1:1000 dilution via a pressure washer set at 3000 psi. The process should be carried out by starting at the highest point and working down.

Recommended Dilution Rates

For use as a pre-wash 1:250 For wash-down 1:1000

Microbiological Efficacy Against Some Microorganisms

E. coli	1:6000	A. niger	1:2500
S. Typhi	1:3000	Ps. aeruginosa	1:6000

Precautions

1. Avoid contact with concentrate.
2. Wear protective clothing, gloves and goggles when handling the concentrate. Wash immediately and thoroughly with water after accidental skin or eye contamination with concentrate.
3. Prevent contamination of food, food utensils, drinking water, rivers, dams, etc,
4. Wash hands thoroughly after use.