

# Poultry Disinfection Programme



Livestock Protection



Evans Vanodine International plc



## Shift™ Poultry Housing Detergent

- Powerful, heavy duty, concentrated detergent for use with all types of high or low pressure machines
- Suitable for cleaning floors, walls, ceilings and equipment in poultry houses by foam application
- May be used through a pressure washer as a cleaner for vehicles
- Pack size: 5lt, 25lt & 200lt polyethylene drums



## GPC8™ Disinfectant

- DEFRA approved Glutaraldehyde disinfectant
- Non-corrosive biodegradable, patented formula
- Highly effective against bacteria, viruses and fungi
- 13 litres makes up to 2,500 litres for general disinfection
- Residual activity on clean surfaces for up to 8 weeks after use
- Pack size: 5lt, 25lt & 200lt polyethylene drums



## Fam® 30 Iodophor Disinfectant

- DEFRA approved for general purpose use to protect livestock
- Bactericidal, virucidal and fungicidal
- Active in the presence of organic matter
- Cleans and disinfects in one operation
- Biodegradable and stable
- Pack size: 5lt, 25lt & 200lt polyethylene drums



## Vanodox® Formula General Purpose Disinfectant

- DEFRA approved disinfectant
- Stabilised blend of Peracetic Acid in equilibrium with Hydrogen Peroxide and Acetic Acid
- Effective against bacteria, viruses & fungi
- Ideal for intensive housing
- Non staining
- Biodegradable and stable
- Pack size: 5lt & 20lt polyethylene drums



# Evans Vanodine International plc Poultry Disinfection Programme

A rigorous and effective disinfection programme is essential to progress towards the effective elimination of viral bacteria and fungal disease-causing microorganisms.

Disease in poultry can result not only in direct losses due to dead birds but also in losses due to poor feed conversions and low weights. The financial cost of these losses far outweighs the cost of implementing an effective cleaning and disinfection programme. Used correctly, disinfection can also reduce the need for more expensive disease control measures such as vaccination and antibiotic therapy.

The number of microorganisms on the surfaces of poultry housing may be **TEN THOUSAND MILLION** or more **PER SQUARE CENTIMETRE**.

These must be reduced to an acceptable level of less than **ONE THOUSAND PER SQUARE CENTIMETRE** during the cleaning and disinfection programme.

Attention to detail is important and the programme must be carefully adhered to in order to obtain the optimum result.

It is advisable to wear protective clothing when using chemicals to clean and/or disinfect and in some situations the use of goggles is required.

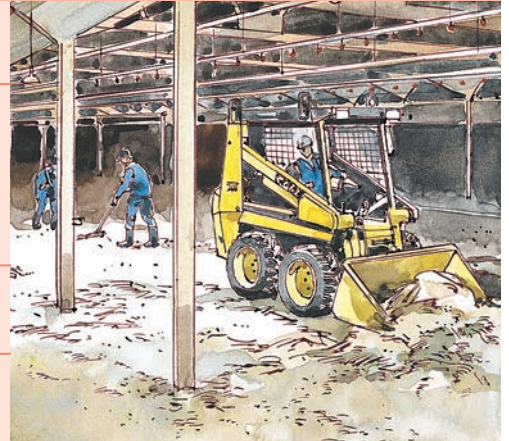
The programme is divided into different stages and each one should be completed thoroughly before moving onto the next.



STAGE ONE	BIRDS AND LITTER REMOVED FROM SITE
STAGE TWO	CLEAN/WASH DOWN HOUSE AND OUTSIDE AREA
STAGE THREE	FLUSH OUT WATER SYSTEM AND DISINFECT
STAGE FOUR	ALLOW TO DRY
STAGE FIVE	APPLY DISINFECTANT AND ALLOW TO DRY
STAGE SIX	REPLACE EQUIPMENT, NEW LITTER AND FUMIGATE OR FOG
STAGE SEVEN	RESTOCK AND CARRY OUT AERIAL DISINFECTION
STAGE EIGHT	SITE SECURITY

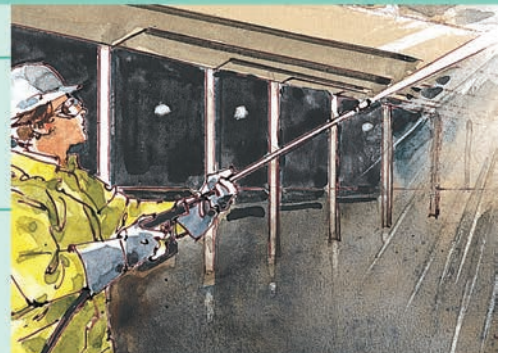
## STAGE ONE BIRDS AND ALL LITTER REMOVED FROM SITE

- 1 All birds and litter should be removed off site before cleaning begins, to eliminate any chance of recontamination.
- 2 Removable equipment should be taken outside and soaked in a trough containing a solution of **Shift™** detergent at a 1:250 dilution to remove soiling; disinfected with **GPC8™** at 1:100 dilution; dried and stored in a clean area before returning to the cleaned and disinfected poultry house.
- 3 After all litter has been mechanically removed from the poultry house, stubborn organic matter can be manually removed by scraping or brushing.
- 4 The removal of gross soiling is important as it makes the wash down with detergent more effective.



## STAGE TWO CLEAN/WASH DOWN HOUSE AND OUTSIDE AREAS

- 1 Use a foaming solution of **Shift™**
- 2 Dilute **Shift™** at a rate of 1:150 (1 litre in 150 litres of water). Apply the solution to all surfaces (working from ceiling to floor and from back to front of house) using a pressure washer (set at 45-70 bar - 620-1200psi). Allow at least 15 minutes before washing off with clean water at no more than 45 bar (620psi).
- 3 The coverage rate for **Shift™** foaming solution is 80 square metres per minute depending on the level of soiling and the speed of the operator.



## STAGE THREE FLUSH OUT WATER SYSTEM WITH DISINFECTANT

- 1 Drain the water system if possible, washing away dirty water. Clean out the tank(s) to remove any biofilm deposits and refill with clean water. Add disinfectant - **GPC8™** or **FAM® 30** at a dilution of 1:200 (1 litre in 200 litres of water) and allow to stand for ten minutes before flushing through to drain off points. Leave to stand for 30 minutes then refill the tank(s) with clean water and flush through once more.
- 2 Dirty water and used disinfectant should be washed away by hosing down.



## STAGE FOUR ALLOW TO DRY

- 1 **IMPORTANT** Allow the house to dry for a minimum of 12 hours and up to 48 hours. This will allow for better absorption of disinfectant when applied and will prevent further dilution of disinfectant in use. Drying is also an effective way to further reduce the numbers of micro-organisms.



## STAGE FIVE

## APPLY DISINFECTANT AND ALLOW TO DRY

1

For terminal disinfection **GPC8™** or **Vanodox® Formula** should be applied using, for example, a pressure washer at a low pressure (35 bar), or a knapsack sprayer. Spray should be directed into the apex of the roof, paying particular attention to corners, cracks and seams, continuing down the walls and across the floor to the drain.

2

The coverage rate is 0.3 to 1 litre per square metre (28ml to 96ml per sq ft). The use of warm water will improve the activity of the disinfectant.

3

For disinfection when there is no specific disease problem dilute **GPC8™** 1:190 or **Vanodox® Formula** 1:145. 13 litres of **GPC8™** or 17 litres **Vanodox® Formula** diluted will make 2500 litres of solution, sufficient to disinfect 26,000 square foot of surface area in a poultry house at a rate of 96ml per square foot, 1 litre per square metre.

4

Increase the concentration of **Vanodox® Formula** where there is a specific disease problem, for instance in the case of Avian Influenza dilute **Vanodox® Formula** at 1:145.

5

The poultry house should be allowed to dry before replacing cleaned equipment and fresh litter.



## STAGE SIX

## REPLACE EQUIPMENT, NEW LITTER AND FUMIGATE OR FOG

1

Fumigation with formaldehyde should be carried out according to the guidelines laid down in UK DEFRA Leaflet No. 514 and requires very careful control to ensure the safety of operators and the effectiveness of the process.

2

Alternatively, fogging with **GPC8™** at a 1:50 dilution will reduce the numbers of bacteria in the atmosphere of the house even further, to provide a safe environment for new chicks.



## STAGE SEVEN

## RESTOCK AND CARRY OUT AERIAL DISINFECTION

1

Once the poultry house has been restocked for 5 days, aerial disinfection can begin.

2

**GPC8™** diluted at 1:200 and applied through an automatic mist generator at a rate of 1 litre solution per 100 cubic metres of air space, twice a day, will reduce the level of bacteria in the air with no adverse effect on the birds.



## STAGE EIGHT SITE SECURITY

### FOOT BATHS AND VEHICLE TYRE BATHS

- 1 Foot baths filled with **FAM® 30** at a 1:100 dilution (for a 12 litre capacity bath add approximately 67ml of **FAM® 30**) should be placed at all entrances to the house immediately after disinfection. Foot baths must be kept clean by changing the disinfectant regularly, otherwise they can be a potential source of bacterial contamination.
- 2 Always dip feet before entering poultry houses.
- 3 If boots are soiled, clean with water and a stiff brush before using foot bath.
- 4 Replace solution in foot baths once a week, or sooner if colour of solution fades.

### DISINFECTION OF PATHS, ROADWAYS AND AREAS AROUND HOUSES

- 1 Keep paths and areas as clean as possible, as litter and refuse are a potential source of infection.
- 2 Spray or brush down these areas regularly with a solution of **FAM® 30** at 1:100 with water, at a rate of 300ml per square metre.



## COST OF DISINFECTANT IN USE

### GPC8™ or Vanodox® Formula diluted at 1:100

Average poultry house floor area	10,000 sq. ft.
Total area of surface to be disinfected (2.6 x floor area)	26,000 sq. ft.
Quantity of diluted <b>GPC8™ or Vanodox® Formula</b> to disinfect 1 sq. ft.	96ml
Quantity of diluted <b>GPC8™ or Vanodox® Formula</b> required to disinfect the whole house.	2496 litres (96x26000/1000)
Quantity of <b>GPC8™ or Vanodox® Formula</b>	24.96 litres
Cost per sq. ft.	<input type="text"/>
Cost of disinfecting a 10,000 sq. ft. house.	<input type="text"/>

## IMPERIAL/METRIC CONVERSION CHART

1 Litre (l)	1000 millilitres (ml)	0.22 gallons
1 Gallon	4.5 (l)	4500 (ml)
1 Square metre (sq. m.)	1.2 Square Yards (sq.y.)	10.8 Square Feet (sq.ft.)



# EFFECTIVE DILUTIONS OF FAM<sup>®</sup> 30 AND GPC8<sup>™</sup> AGAINST A RANGE OF POULTRY PATHOGENS

Bacterial Disease	Effective Dilution	
	FAM <sup>®</sup> 30	GPC8 <sup>™</sup>
Arizonosis	1:100	1:200
Colisepticaemia	1:100	1:200
Fowl Cholera	1:100	1:400
Fowl Typhoid	1:100	1:100
Pullorum	1:100	1:200
Salmonellosis	1:200	1:400
Staphylococcal Infections	1:50	1:1000
Yolk Sac Infection	1:75	1:250
Viral Disease	Effective Dilution	
Avian Influenza	1:100	1:200
Egg Drop Syndrome	1:33	1:100
Infectious Bronchitis	1:55	1:100
Infectious Bursal (Gumboro)	Not Effective	1:100
Infectious Laryngotracheitis	1:100	1:400
Newcastle (Fowl Pest)	1:100	1:190
Turkey Rhinotracheitis (TRT)	1:100	Not Tested
Fungal Disease	Effective Dilution	
Aspergillosis	Not Effective	1:10
Candidiasis	1:50	1:100

\* Active dilutions for Vanodox<sup>®</sup> Formula are available on request.





Evans Vanodine has been developing and manufacturing consistent, efficient and cost effective cleaning and hygiene products for over 95 years. Its products cover an extensive range of applications for the industrial, janitorial, food process and animal health sectors. The company currently exports to 72 countries worldwide, with a further 10 countries serviced by licensed manufacturing units overseas.

Evans Vanodine has built a reputation based on innovation and commitment to research and development, ensuring a flow of new and improved formulations. In-house laboratories enable the company to deliver quality and consistency at every stage of production and the company has achieved accreditation by the British Standards Institution under ISO 9001 and ISO 14001. The UKAS accredited Microbiology laboratory is approved to test disinfectants against European Standard test methods, which ensures products are fit for purpose and that bactericidal claims are substantiated, with test profiles available to customers.



Commitment to quality and service is deeply rooted in the Evans family tradition and this, together with dedicated staff throughout the company, will ensure continued success for Evans Vanodine and their customers for years to come.

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