



Halamid®

100% Chloramine T
(Sodium-N-Chloro-para-toluene sulfonamide)

- Ministry Approved
- A broad spectrum biocide
- Readily biodegradable
- The Universal Biocide
- Effective against bacteria, viruses, fungi, algae, yeasts and parasites
- Terminal disinfection
- Fogging
- Drinking water disinfection and sanitisation
- Work surfaces
- Foot dips
- Vehicle disinfection

Further information is available from:
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Highly Effective, Low Cost Poultry House Disinfection

Below are the results of a recent trial carried out on a UK Commercial Broiler Farm, using a disinfection programme based on the use of Halamid as the Terminal Disinfectant.

The results show TVC levels reduced to 10^1 or <10 at the end of the programme. In particular, please look at Halamid® applied at 1:500. In this trial, 1000 litres of water was used for each 1338m² house (14,400sq ft).

Area Sampled	Total Viable Count Per square inch of test area		
	Vetrequat 1:350 Pre-Disinfection	Halamid 1:500 Post-Disinfection	Post-Fumigation With formaldehyde
Floor	16,000	140	< 10
Wall	5,000	10	< 10
Dwarf wall	1,400,000	3,000	30
Feeder	14,000	550	< 10
Drinker	11,000	10	< 10

Halamid 1:500 Programme 1 Test A

Area Sampled	Total Viable Count Per square inch of test area		
	Vetrequat 1:350 Pre-Disinfection	Halamid 1:500 Post-Disinfection	Post-Fumigation With formaldehyde
Floor	13,000	30	30
Wall	2,500	< 10	< 10
Dwarf wall	1,350,000	640	< 10
Feeder	45,000	90	< 10
Drinker	7,000	20	< 10

Halamid 1:500 Programme 1 Test B

Area Sampled	Total Viable Count Per square inch of test area		
	Vetrequat 1:350 Pre-Disinfection	Halamid 1:500 Post-Disinfection	Post-Fumigation With formaldehyde
Floor	180,000	5,000	490
Wall	10,000	820	30
Dwarf wall	600,000	23,000	90
Feeder	4,000	< 10	< 10
Drinker	75,000	650	30

Halamid 1:1000 Programme 2 Test A



Area Sampled	Total Viable Count Per square inch of test area		
	Vetrequat 1:350 Pre-Disinfection	Halamid 1:500 Post-Disinfection	Post-Fumigation With formaldehyde
Floor	14,000	230	20
Wall	2,000	20	10
Dwarf wall	99,000	220	30
Feeder	7,000	370	< 10
Drinker	220,000	80	< 10

Halamid 1:1000 Programme 2 Test B

Two cleaning programmes were used, each in two houses:

Programme	Wash/Pre-disinfection	Terminal Disinfection	Fumigation
One	With PHARMAQ Vetrequat	With Halamid 1:500	With Formaldehyde
Two	With PHARMAQ Vetrequat	With Halamid 1:1000	With Formaldehyde

Each Terminal Disinfectant was applied as a Fine Spray via an Orchard Sprayer, i.e. standard application by the Contract Cleaning Company.

Testing was carried out by an independent Diagnostic Testing Laboratory. Five samples were taken from each of the 5 areas shown.

Biocidal mode of action of Halamid®

Halamid®, dissolved in water, ionises and forms the Chloramine T ion. This Chloramine T ion reacts with organic material, such as bacteria, fungi, viruses, with which it comes into contact. This oxidative reaction quickly kills the micro-organism, even at low concentrations and low temperatures. Because of the irreversibility of the oxidative reaction there is no possibility for the micro-organisms to create resistance.

The biocidal properties of Halamid® are based on the Chloramine T ion itself which is directly involved in the oxidative destruction of bacteria, viruses and fungi.

Method of Application

Halamid® can be used as a dip, in a spray, in a pressure washer, or as a fog. If it is mixed with a foaming agent, then it can be foamed on surfaces.

Use	Application Rate
General Disinfection	In a recent trial (see over), Halamid® used as a Terminal Disinfectant at 1:500, proved very successful.
Aerial Fogging	Use at a rate of 1 part to 10 parts water (100 g in 1 litre). Apply at a rate of 10 ml solution per cubic metre of air space.
Sanitising Water Systems (birds in)	5 to 10 g per 1,000 litres in drinking water.
Disinfecting Water Systems (birds out)	When house is depopulated, add to header tanks at 5 g per litre of water (1 kg in 200 litres)

Sanitisation of Drinker System: Preparation of Stock Solution

To prepare Stock Solution, add 20g Halamid to one Litre of water.

Header Tanks:	Header Tank Lts	Stock Solution, ml
	200	50
	100	25
	500	125
	1000	250

Water Proportioners:

The amount of Halamid (in grammes) to add to 10 Litres of Stock Solution at the different dilution settings is

Proportioner Setting	Halamid Required, g
1 to (1:)	
50	2.5
100	5
150	7.5
200	10

To calculate alternative dilution settings, divide the setting value by 20 (twenty).
For example, Setting = 1:200, divide 200 by 20, gives 10g Halamid in 20 Litres water



This preparation has been approved for use in England by the Secretary of State for Environment, Food and Rural Affairs and in Scotland by the Scottish Ministers as a disinfectant for the purposes of the Animal Health Act 1981 in respect of:

Foot and Mouth Disease at the dilution rate of one part of this preparation to 200 parts of water

Swine Vesicular Disease at the dilution rate of one part of this preparation to 90 parts of water

Diseases of Poultry at a dilution rate of one part of this preparation to 1000 parts of water

General Orders at a dilution rate of one part of this preparation to 300 parts of water

The contents of this container are hereby guaranteed to be the same quality and composition as the sample submitted to the Secretary of State for approval testing.

Acknowledgements:

- G&M Cleaning (Whitton, Knighton, Powys)
- Scitech Laboratories (Craven Arms, Shropshire)

Spectrum of Activity

In solution, Halamid[®] ionises to form the active Chloramine T ion. Pathogens are rapidly destroyed through oxidation of the cell material. Halamid[®] has been shown to be effective against 94 species of bacteria, 49 species of virus, 22 species of fungi, 6 species of algae, 4 species of yeast and 4 species of parasite.

In vitro tests were carried out against 8 species of common bacteria using 10 isolates of each species. A 0.3% solution of Halamid[®] was used.

Characteristics

Halamid[®] is a white crystalline powder with a weak chlorine odour. The pH of the solution will vary with the concentration. A 5% solution varies between pH8 and pH10.

Halamid[®] is very stable and has a long shelf life. The solution is stable for several days and the powder for at least one year. At the recommended dilutions it does not stain clothing or skin. The in-use dilutions are non-corrosive.

Ecotoxicity

Halamid[®] has a very low toxicity. It is readily biodegradable and does not accumulate in the environment.

